



'PLEASANT WORDS are as an honeycomb sweet to the soul'

Prov. XVI. 24.



LONDON, HOULSTON & STONEMAN.
EDINBURGH, MENZIES DUBLIN, ROBERTSON

PREFACE.



THE fourth volume of PLEASANT Pages completes two-thirds of the series, which will extend to six volumes.

It may be remembered, that the object for which this work was commenced is to exemplify the practice of an improved system of education, founded principally on the views of PESTALOZZI. The six volumes will thus comprise twelve subjects of instruction, viz.:— Courses of Moral Tales, of Biography, Natural History, Botany, Object Lessons, English History, English Geography, Foreign Geography, Physical Geography, Grammar, Arithmetic, and Drawing; with a selection of Poetry, and pieces of Music. These Lessons are, as far as possible, arranged that there may be one for every week-day; so that the whole work may supply three years' daily instruction. As the price for the six volumes will be One Guinea, the cost of each year's instruction will be seven shillings, or 1s. 9d. per

quarter; so that children of all classes may thus be educated for three years at an exceedingly cheap rate.

It is almost unnecessary for the Author to repeat his thanks to the Public for the increasing patronage which the work still receives. He is gratified to find that, in consequence of the recommendations of its Subscribers, the circulation of the first volume is at present as rapid as it was at the beginning of its publication; and although, since then, several works of a similar nature have appeared, each has formed for itself a new sphere of usefulness, without limiting that of
PLEASANT PAGES.

THE PRIORY HOUSE, CLARKE,

June, 1852.

PATRONIZED BY HER MAJESTY THE QUEEN.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION
FOR THE FAMILY AND THE SCHOOL.

(*To be completed in Six Volumes, price 3s. 6d. each.*)

This work is intended to form A STANDARD PRESENT FOR YOUNG PEOPLE. When complete, it will comprise, in the convenient form of Six Volumes, an ILLUSTRATED JUVENILE LIBRARY of *Moral Tales*; *Biography*; *Natural History*; *Botany*; *History*; *Travels in England and Foreign Countries*; *English Grammar*; *Object Lessons on Articles of Manufactures, Metals, &c.*; *Physical Geography*; *Arithmetick*; *Elementary Lessons in Drawing and Perspective*; *Drawing Copies*; *Poetry and Music*.

The Four Volumes now published form a Course of Daily Instruction for Two Years. *The Eleventh Thousand of Vol. I. is now ready.*

The following are selections from more than Three Hundred Notices by the Press:—

"The third volume of this unequalled Journal for the young is just completed. We have watched its progress from the commencement, and can conscientiously say for the instruction of infant minds, we never saw a work that could be compared with it. * * * * * This admirable work has been patronized by her Majesty, and we rejoice at it, for such a Christian tone never pervaded English History as that which Mr. Newcombe has infused into his. We are glad for the sake of the young scions of Royalty that they are under such excellent training as that contained in PLEASANT PAGES, and we rejoice still more that the Queen of England can rightly estimate the sentiments inculcated in them."

"Some time ago we took occasion to recommend it to our readers as strenuously as we could, and in stronger terms than we generally make use of. Since then we have received a batch of fresh numbers, and, after looking over them, our approval remains as strong as before. * * * * The plan it adopts is simple and sure. The greatest dullard will progress in knowledge under the influence of this attractive instructor; the idler, we predict, will succumb to its allurements."

"Children of tender years may read in it to advantage, and children more advanced will profit by it. Let them take the parts of papa, mamma, Willie, and others, and read out to the seniors in the parlour during the evening, and all will be gainers. There is no better book to give to a youth or family as a present, and we cordially recommend it for this purpose."

"We really do not know where to find words that shall more earnestly extol the worth of these *pleasant pages* than we have hitherto essayed, but if such words were to be had, we should gladly avail ourselves of them."

"As prizes for Sunday or other schools, the volumes are peculiarly adapted."

"The philosopher and Christian alike find ground for commendation in PLEASANT PAGES."

Also, now ready, price 2s. 6d., beautifully Illustrated,

LITTLE HENRY'S HOLIDAY AT THE GREAT EXHIBITION.

Selections of Notices from the Press.

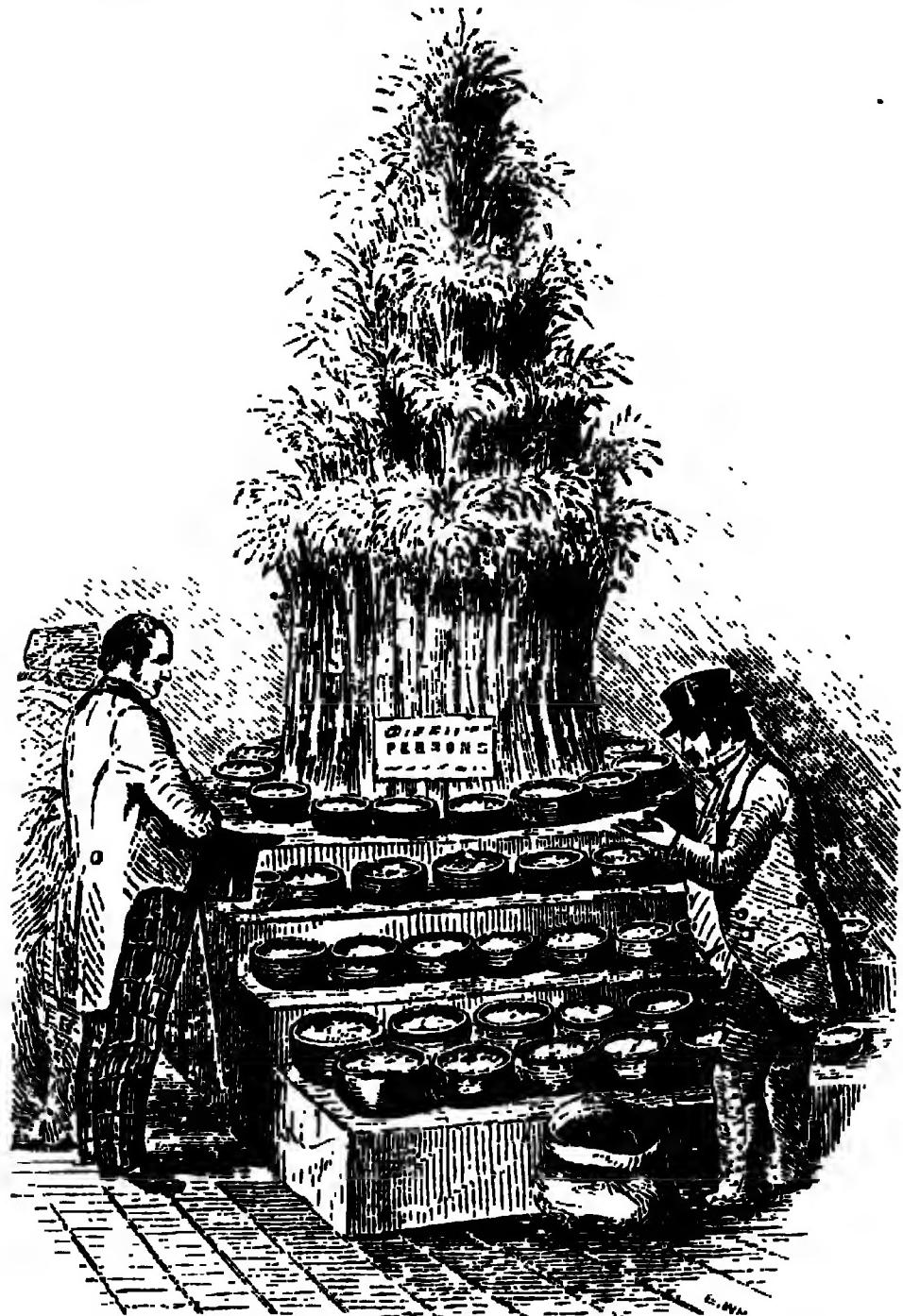
"The already favourably-known editor of PLEASANT PAGES has conferred another boon on the rising generation in the excellent little work now under our observation. An event in itself so remarkable and so pregnant with instruction of the highest order as the London Exhibition of 1851, is peculiarly one which judicious writers should seize upon for the instruction and improvement of youth. It was here that might be had at a glance even more than the knowledge which is diffused through many school-books. * * * * * The idea has been profitably turned to account in the little book before us, where all the leading characteristics of the Exhibition, the origin and early progress of the project, and the classification and description of the goods, are treated of in a popular manner, with the advantage of great discrimination in the selection of subjects. The arrangement is admirable, and the moral reflections at the close of the book, and the results accomplished, cannot fail to exercise a beneficial influence on the minds of its readers."

"A charming little book—quite a classic of its kind. We have seen no account of the 'Exhibition' that is better calculated to interest and instruct young people than this fascinating little volume. Her Majesty, we understand, has expressed her approbation of the work, and ordered copies for the royal children."

*In elegant cloth binding, gilt edges, price 3s. 6d.,
(By the Editor of PLEASANT PAGES.)*

FIRESIDE FACTS.

A Series of Object Lessons on Articles of Food and Clothing, selected from the Great Exhibition.



THE CORN TROPHY—(RUSSIAN DEPARTMENT).

THE IDEA OF MAKING THE EXHIBITION A SCHOOL-ROOM was partially carried out during the period of its existence. Classes were held, and lectures were delivered by eminent professors. Never before did so large a collection of objects supply subjects for "Object Lessons." Two things, however, were wanting. 1st. That such Lessons should be within reach of the young. 2nd. That they should be recorded in a book for future study.

"Fireside Facts," therefore, has been written to supply, from the GREAT EXHIBITION SCHOOL-ROOM, an EXHIBITION SCHOOL Book, *filled with useful information*. It contains interesting reading for the *Family* round the fireside—the *Teacher* in his study—and the *Children* in school. Its character may be seen in the following selection of its contents: -

PART OF THE CONTENTS.

CHAPTER X.

The Vegetable Food of Tropical Countries.

Rice.	Mace.	Sugar.
Maize.	Pepper.	Cocoa-nut.
Sago.	Cinnamon.	Date.
Arrow-root.	Allspice.	Banana.
Tapioca.	Cloves.	Bread-fruit.
Yam.	Tea.	Cow-tree.
Ginger.	Coffee.	Banian-tree.
Nutmeg.	Cocoa.	Lentil.

CHAPTERS XII. AND XIII.

The Vegetable Food of Temperate Countries.

Corn Plants.	Various Tribes.	Olive Tribe.
Leguminous Plants.	Goosefoot Tribe.	Orange Tribe.
Cruciform Plants.	Fruits.	Nuts.
Umbelliferous Plants.	Nettle Tribe.	Fluids.
Composite Plants.	Gooseberry Tribe.	

CHAPTER XVII.

Articles of Clothing.

Cotton.	Silk.
Flax.	Fur.
Straw-plait.	
Wool.	Leather.

The following Specimen Pages contain part of an Object Lesson on Tea.

London: HOULSTON and STONEMAN; and may be obtained through any Bookseller in Great Britain.

Specimen Page—"Fireside Facts."

ARTICLES OF FOOD.—TEA.

it causes people to talk, and be more lively. When people are dull, it serves to *stir them up*, just as coffee does. What is the Latin word for "stir up"? I forget.

I. I remember it. *Stimulare*, to stir up; and we call the coffee *stimulating*.

L. And, if you remember, we said that coffee is *refreshing*; and because it makes people glad, we call it *exhilarating*.

W. And, because it acts as a medicine, and keeps the students from going to sleep, we call it *medicinal*.

P. Yes. You said that the coffee, in its "effects," is *refreshing*, *stimulating*, *exhilarating*, and *medicinal*: and these effects also belong to the *tea*.

W. It is very easy to know that tea has such effects, because we can feel them, and can notice them in other people, but I should like very much to know *how* the tea does so. Do you know, papa?

P. What do you want to know?

W. How the tea exhilarates people, and refreshes them. What it does *inside* them, to change them so.

P. Well, I cannot say that I know, exactly, but I will tell you all I have learned about it. There is, both in the leaves of tea, and the berries of coffee, a peculiar substance which produces these effects. Although this substance is found in both articles, we give it different names. When found in *tea*, we call it "*Theine*"; and when found in coffee, we call it "*Caffeine*".

I have a little book on chemistry, written by a German gentleman named *Liebig*, and I will read you what he says of *Theine*. "When common tea-leaves are placed in a watch-glass, loosely covered with paper, and gradually heated on a hot iron plate, until they are brown, *long white shining crystals* appear on the paper, and on the surface of the leaves. This is *theine*." You can now easily understand that, if instead of heating the leaves on a watch-glass, they are heated in boiling water, the *theine* would not form dry crystals.

L. No, it would be dissolved in the water.

P. That is the case. So, the next time you are going to drink a cup of tea, you may look at it and remember that it is the *theine* dissolved in the water, which will refresh you.

W. Now I know something more, papa. But still you have not told us *how* the *theine* in the tea refreshes us.

P. I will tell you as much as I know of the subject. You have often heard how, when your food is being digested, it is dissolved by a fluid called the *gastric juice*. The food is afterwards acted upon by another fluid from the liver, which we call *bile*; but if we have not sufficient bile within us, what then?

L. Then our food will not be digested, I suppose.

P. And we shall feel unwell. Persons who do not take sufficient exercise, do not form sufficient bile; but the *theine* in tea will supply the substance

Specimen Page—"Fireside Facts."

ARTICLES OF FOOD.—TEA.

required for the purpose. This fact explains why men who sit much, and study, and females who do not often go out of doors, are so fond of tea.

W. Then, we may say—as the tea helps to form bile, the food is digested more quickly.

P. Yes; or the food is *assimilated*, as we say. By assimilation, we mean that the food becomes part of our body, by being changed into blood. The bile helps in this process; and this, when the theine of the tea helps to form bile—?

W. The bile helps to form the food into blood.

Ion. And the blood begins to circulate more quickly, and we feel more lively—we are stimulated and refreshed. Most people feel lively after tea.

P. Thus, where food is difficult to digest, tea is often useful. Which kind of food have I told you is harder to digest—*Animal* or *Vegetable* food?

L. You said that vegetables were more hard to digest, and that grass-eating animals require salt to help their digestive organs.

W. Just as you said that we require pepper to help to digest cucumber, and other raw vegetables.

P. Thus we find that tea, also, is much used amongst nations which subsist principally on vegetables. The great chemist named *Liebig*, whom I mentioned just now, says in one of his books, "Tea and coffee were originally met with among nations whose diet is chiefly vegetable."

Ion. But suppose, papa, that

a nation could not procure any tea. The English people had no tea at one time, I suppose. What did they do then?

P. Then, they used something else which answered the same purpose by helping digestion, or by stimulating and refreshing their bodies. Let me tell you something which is worth remembering. If people would only live on proper food and eat it in proper quantities and take proper exercise, they would seldom require such stimulants. But whenever people are poor and are poorly fed, they make up for the "sinking feeling" which such want occasions, by tea, coffee, tobacco, opium, and, worse still, beer and spirits. It is said that in Germany, those who receive the lowest wages, while they are obliged to live on bread and potatoes, always reserve a portion of their wages for coffee.

Ion. I quite understand why they do that.

P. I should like you to understand it very clearly. I will say it to you once more: "Where there is good and nutritious food (containing *azote*, a word which I will explain to you some day), and with such nutritious food exercise is taken, the azote in the food forms sufficient bile; but, where the food is poor, or hard to digest, and sufficient exercise is not taken, then sufficient bile is not formed; and men use the *theine* in tea, or the *caffeine* in coffee, or some other stimulant for the purpose."

L. Then the lesson we may make about tea, is, that if we took great care to have proper

Now ready, 1s. 6d. per Vol., or the Two Vols. in One, 3s.,

THE FAMILY SUNDAY BOOK: A Series of "Bible Pictures" for the Family.

Selection of Notices from various Public Journals.

"The style is familiar, and the inferences are all strictly evangelical; and so thoroughly imbued with that 'charity which hopeth all things,' that the spirit of the Gospel hovers over and brightens the narrative. We recommend this work strongly to parents as one that will prove highly useful to their children and servants, and even the aged and the learned may read its simple pages with profit and pleasure."

"Every religious family should have it."

"Scriptural scenes and instruction are conveyed in simplest guise, . A flood of Christian light flows easily into the youthful mind. What we have said in favour of PLEASANT PAGES applies in full to its companion. We recommend our local booksellers to get a few numbers of each for their counters."

"Truth had never a more attractive expositor for the young. Every family ought to have in its possession THE FAMILY SUNDAY BOOK, so it contains the richest treasures of Scripture History, so written as to find ready acceptance in the infant mind."

"The story of Joseph and his brethren, so attractive to children, is presented in the most glowing colours, and beautiful Christian instruction is drawn from every incident."

"A very difficult task is here aimed at—to adapt the Scriptures to the comprehension of children's minds, and the writer has succeeded far beyond all preceding authors. We wish we had space to extract the Offering-up of Isaac as an example. It is beautifully treated."

"The Scripture training thus early commenced is the most powerful means of shutting out Romanism, or any other *ism* which pollutes the pure fountain of Christian truth."

Also now ready, price 1s. 6d., Vol. I. of

LITTLE HENRY'S SUNDAY BOOK:

(A Continuation of the "FAMILY SUNDAY BOOK:")

BEING

A SERIES OF CONVERSATIONS ON THE

LIFE, MIRACLES, AND MARVELS OF OUR SAVIOUR.

London: HOULSTON and STONEMAN; and may be obtained through
any Bookseller in Great Britain.

Will be published in June, 1852,

**TWO NEW SERIES OF DRAWING LESSONS,
AS A CONTINUATION TO THE COURSE OF DRAWING LESSONS
IN "PLEASANT PAGES;"**

THE FIRST ENTITLED

SKETCHES OF FAMILIAR OBJECTS;

THE SECOND,

CONSISTING OF LANDSCAPES, ETC., ENTITLED

SKETCHES IN THE FIELDS.

Each Series will contain Six Parts, at 6d. each.

THE

STORY OF THE PRESENT HALF CENTURY,

To be completed in Fifty Annual Volumes, 1s. each.

Copies bound in ultramarine cloth, gilt edges, 1s. 6d. each.

Now ready, Volume I., bound in cloth, entitled

**OLD EIGHTEEN - FIFTY - ONE,
A Tale for any Day in 1852;**

BEING

I. HISTORY OF THE PRINCIPAL EVENTS OF THE PAST YEAR.

The object of this Series is to provide for the young, at the close of each year, a short account of its most striking events, and to keep up an intelligent interest in the various movements around them for the benefit of mankind. By this means all children may be provided with a short and emphatic history of their own times, from their childhood to manhood.

Contents.

PART I.—INTRODUCTION.—Chap. 1. The "Party"—The Strange Visitor.—Chap. 2. The Arrangements.

PART II.—THE NEWS FROM ENGLAND.—Chap. 1. The Progress of Intelligence.—Chap. 2. Sanitary Progress.—Chap. 3. Social Progress—Chap. 4. The Progress of Temperance.—Chap. 5. The Progress of Anti Slavery.—Chap. 6. The Progress of Peace.—Chap. 7. The Great Exhibition—Zoological Gardens, &c.—Chap. 8. General News.—Chap. 9. General Bad News.—Chap. 10. The Progress of the Government.—Chap. 11. The Progress of the Colonies.—Chap. 12. The Deaths of Eminent Persons.

PART III.—THE NEWS FROM FOREIGN COUNTRIES.—Chap. 1. The News from France, Italy, Austria, America, &c.

With Nineteen Illustrations.

London: HOULSTON and STONEMAN; and all Booksellers.

"PLEASANT WORDS are as an honeycomb; sweet to the soul."
PROV. xvi. 24.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION

FOR

THE FAMILY AND THE SCHOOL.

BY S. PROUT NEWCOMBE

1st Week.

MONDAY. Moral Biography.

INDUSTRY.

INTRODUCTION. — THE NOBLEMAN'S SON.

Ian. Papa is coming directly, learning about them after they Ada; he is going to teach us some Biography.

Ada. I wonder what that is! Do you know, Ian?

Ian. Yes; to be sure. It means—"men's lives." Here comes papa, and here are Willie and Lucy.

Ada. Please, papa, what are we going to learn Biography for?

P. I will tell you. Do you not know how men come into the world, and stop a little while, and die? Then they are forgotten.

W. Are they all forgotten?

P. Not all. Perhaps ninety-nine out of a hundred are. But there are a few who live a better life than others. They think better thoughts than others, and they perform nobler actions. These men seem to live nearer to heaven than others do, and to keep company with angels and good spirits. So, because they rise up above others, we call them "greatmen."

Ada. But what is the use of

P. There is very much use. Remember the beautiful hymn which we printed in PLEASANT PAGES some time ago!

"Lives of great men all remind us
We can make our lives sublime;
And, departing, leave behind us
Footprints on the sand of time."

L. I remember that very well, papa! and I remember the next verse:

"Footprints, that perhaps another,
Sad o'er life's solemn main,
A forlorn and a shipwrecked brother,
Seeing, may take heart again."

So, I suppose we are to learn biography to see *how* these men lived, and to make our lives like theirs; we are to follow them.

P. True. They are our guides; they have been compared to stars. You have heard how, sometimes, in dark nights, the traveller loses his way, and looks up to the stars to guide him safe home.

W. That is, if he knows them.

P. Yes. So great men are like bright stars, which guide our wandering spirits to the heavenly land from whence all spirits come ; that is to say -- if you know them.

W. Only some stars move about ; they are not certain. "Planets" they are called.

P. But there are fixed stars. There is one called the Polar star, a true and fixed star, which is the most sure guide the traveller can find. So there has lived in this world One who led a *true* life, brighter than that of any man ; and when guided by it men are sure of reaching heaven.

W. Ah ! you mean Jesus Christ, papa. Shall we hear of Him first ?

P. Not now ; we will talk of Our Saviour on the Sabbath-days, and you shall read His life from our new book for the Sunday.*

* This is the idea I have for our new course.

Last year (1851) was the year of the EXHIBITION OF INDUSTRY. Then, men saw what Industry can do, learned how much they owe to her, and learned to honour her. The beautiful fruits of industry which were there collected, are now scattered again. But we may still make a beautiful Exhibition. Instead of the exhibition of their works, suppose I exhibit to you the *lives* of some of the great industrious men to whom we owe so much ?

L. I should like that, papa, very much.

P. So, when we have taken their portraits, we shall have a picture-gallery of great men. They will teach us moral lessons on industry, and order, and much else that is good. But to-day I will only tell you a little tale to show you how I first learned to love industry.

The Newman's Son.

When I was about eight years old I used sometimes to take my pony to the blacksmith's to be shod. I liked that blacksmith's shop, for I used to sit in a dark corner and watch the bright fire while the pony's shoes were put on. Oh, wasn't that a merry fire ! What games the fire and the bellows used to play there all day long ! As soon as Dick Bird, the blacksmith's son, moved the great bellows' handle, you heard a roar - some one seemed to sing out to the fire, "Wor or-or-or-ork."

Ada. That was the bellows !

P. So it was ! And then the fire brightened up and worked with all his might. If he had been shuddering lazily, with a tired red face, the sound of the bellows put new life into him. Up started the yellow flames and burned brightly. "Worork !" said the bellows once more ; then they burned *more* brightly. "Wororark-wororork," grumbled old bellows again in double bass, and then they burned *most* brightly : so that the blacksmith threw them in a piece of iron to burn. Then indeed they danced about like mad things, until the black-

smith seemed to think they were overworking themselves, and threw cold water on them. "Work," once more sang the bellows; but the water had checked the flames, and the cinders, which had been red, now burned up with a brilliant whiteness.

So the fire worked, and so did the men--except that while the fire and bellows sang bass, the men's working music was treble. *Ting, ting-ting, ting,* was the sharp merry sound which two hard-working-men made with their heavy hammers. The bright red sparks danced all about to the music; but, the giddy things! the men did not heed them. They worked on until the hot-iron which Dick Bird had snatched out of the fire with the pincers became a horse-shoe, fit for my pony to wear.

"Just let this lad of mine hold the pincers while you strike," said a gentleman, as he walked in with a boy about eleven years of age, one day while I was watching. As I sat in the dark corner, and saw the light of the fire shine on the boy's face, I knew him directly. It was CLIFFORD LANGRON, the last new boy of our school. He had lately come home to live with his father, who was a nobleman; and he was thought to be one of the laziest boys ever seen: we often wondered what sort of a nobleman he would make when he grew up to be a man.

When the blacksmiths heard the nobleman's speech, they looked up with surprise, for he

was a very ill-noble; nearly every house in the town belonged to him. But he persisted in his request, and his son held the hot iron with the pincers while the blacksmith struck it. Poor fellow, he did not get on very well! for he could not hold the iron tight enough, and the blows of the hammer sometimes made him shake.

But the nobleman did not mind. "Hold fast, my boy!" he cried. "There, that is the way! Now, take this heavy hammer in your hand: let me see you weld the iron yourself. Give it a good blow!" The poor boy was not unaccustomed to such work; but he did his best, and persevered until the iron was nearly cold.

"There!" said the nobleman, quite pleased when he saw the sweat on his son's brow. "Now I respect you!"

"Why, sir?" was the reply.

"Because," said his father, "you have helped to make a horse-shoe. At last you have done some good in this world. You are almost as respectable as Dick Bird, who blows the bellows. But you cannot be so useful as Mr. Bird himself; come, shake hands with your teacher, and let us bid him good-bye." So, bidding a friendly good-bye to the blacksmith, who bowed very low to his lordship, he made his son shake hands with him, and left.

My pony was by this time quite ready, so I mounted him, and overtook his lordship and Clement, that I might hear what they were talking about.

"I hope, my boy," said his

lordship, when I told him I had seen his son at work, "that you will tell all your school-fellows what Clement has been doing. It is the first useful action I have seen him do since his return home."

"But, sir," said Clement, "I have learned a great many things at school."

"That only shows that you *may* be of use: you may one day do good with your learning; but, have you been able to benefit anybody with it yet?"

"Not yet, sir."

"Then let me teach you again, that although you are my son, you are not yet as respectable as Dick Bird, and you never will be respectable until you are of use. No one is respectable in this world who *can* do some good, and does not. If you have come into this world, and think it would be well to live, and pass through it without doing any good, be sure you are mistaken! It is a sorrowful thing for me to say, but it would be quite as well if you were dead! You can labour; then you should make up your mind either to labour or to die. Better die than do nothing—better die than live to be of no use."

L. That is what our Saviour said of the barren fig-tree, papa! "Cut it down, why cumbereth it the ground?"

P. True. Now hear the rest of the nobleman's speech to his son.

"Depend upon it," he said, "if you could leave this world, and go up to heaven, where the angels live, you would find them

all at work. They are all 'ministering spirits'; their happiness is in being useful—in doing good."

"What do you think the angels would say, if you were taken up to heaven and told to join them?"

"I don't know, sir."

"Then, I think they would say. 'Take him away; he has grown up to be twelve years old, and has not used one of the talents given him by God.' When we pick up some rotten withered fruit, we despise it, and throw it away, because it is useless; so might the angels pity you, and throw you away as a useless thing."

After the nobleman had said this, he told us both to learn to work hard and to do good, that we might be like the angels. "None," he said to his son, "are so noble as the 'ministering spirits'; so you will not be 'noble,' you will not even be 'respectable,' unless you try to copy them."

W. And did Clement learn to be industrious, then, papa?

P. He did for a time; but I am sorry to say that he forgot himself again. He was a silly, proud boy, and he still looked with contempt on those who were poorer than himself.

But on Clement's next birthday, when he was twelve years old, his father gave him another lesson. It was the middle of the month of May; there was, as usual, a holiday at the great house, and in the evening a great crowd of townsppeople and country folks, who were

the nobleman's "tenants," were met in one of his fields to play at cricket. There were plenty of other games; plenty of refreshments were given to all who came; and all were merry, when the nobleman was seen coming, with Clement, towards the field. As soon as he arrived, all cried "Hurrah!" and waved their hats; and when Clement came round to the people, they began to make their bows to him.

But when the first man bowed the nobleman stopped him. "No!" he said, "my son is still idle; he does not work; do not bow to him. Pray, my good man, what work do you perform every day?"

"I take care of the cows, your lordship. Sometimes I help milk 'em," was the reply.

"Then take off your cap, Clement!" said his father; "you have to thank this man for the milk you drink." And Clement was obliged to make a bow to the man.

"What is *your* work?" said the nobleman to a little girl standing near.

"Sometimes I help, sir, to make cheese."

"Make a bow to her, Clement!" said his father. "Perhaps you have been eating some of her cheese."

Clement thus walked round to nearly fifty men, women, and children. He had to bow to them all, for it was proved—first, that they all were of more use than he; and, secondly, that he owed something to the industry of every one. He was indebted to them, either for his

shoes, or coat, or food, or other comfort. "You see," said his father, "what would become of you if these people would not work for you. You would die!"

"And now learn, thirdly," said his father, "whoever labours to make the smallest thing—if he only take a few thin webs of silks, and weave them together to make them more useful—he produces something; he does some good; he helps to make the world better. So learn, my boy, to honour Industry, and to be of use!"

And it was proved, fourthly, that the poor men were more respectable than he. "I have made you bow to these poor people," said his father, "because they are *producers*, while you are only a *consumer*. See what a helpless thing you are—you depend on them entirely. Without their labour you would die!"

Then the nobleman spoke to all his tenants, and commanded that, in future, no man, woman, or child, should ever bow down to his son, until he was known to be an industrious lad; until he could show that he had *laboured*, and produced something.

Soon after I left the town, but I have since heard that Clement has grown up to be of great use; and it is believed that God will bless him to do great good in this world before he dies.

I cannot stop to tell you *how* he is useful; but I wonder, Willie, in what way *you* will be useful before you die?

VERTEBRATED ANIMALS.

RECAPITULATION. THE TWELVE ORDERS OF MAMMALS.

L. HAVE you finished the lessons on Mammals, papa?

P. Not quite. We will just have two short lessons to recapitulate; and then, instead of beginning a course on *Birds*, you shall learn the qualities, parts, and uses of *Flowers*; and learn how to arrange them.

L. That is the study which is called BOTANY, I think.

P. Yes. But let me see what you remember of your NATURAL HISTORY. You have already had 104 questions (see p. 392, vol. ii., and p. 5, vol. iii.) It would be better for you to answer these once more before attending to the new ones which I am now going to give you.

1. Name the twelve orders of Mammals.

2. I will tell you six particulars concerning an animal, then tell me its name. It burrows in the earth; it will eat putrid flesh; yet, unlike the *true* flesh-eating mammals, it has little means of defence—its only protection is its covering of bony plates; it also burrows in the ground; it has no front teeth.

3. Where is it found?

4. Give the name of this animal—I will give you five particulars. It eats vegetable food, and sometimes other substances; its front teeth are constantly growing; it does not procure its food with its mouth, as cows and other *true* vegetable feeders do; it grasps its food with its nose; it is the largest of the land mammals.

5. How many different sorts of this animal have you heard of?

6. Here are four particulars. Tell me the name of the animal. It is quiet and harmless, living where vegetable food is to be had; it sits up on its hind legs and tail; its young are born in a very imperfect state; when attacked, it takes great leaps to escape the hunter.

7. In what part of the world is it found?

8. Here are three particulars concerning an animal. It has a valuable fur; it was, when first discovered, called a "woolly field-mouse;" it is one of the Rodents. Name it.

9. Here are two particulars. A certain animal has horns; with its palmated antlers it is said to clear away the snow from the earth during the dreary Lapland winter. The name of the animal?

10. Here is one fact concerning an animal. It has tufted horns. What is its name?

11. To which orders do the following animals belong? The Horse, Camel, Ass, Pig, Opossum, Porcupine, Sloth, Sheep, Genet, Squirrel, Hyena, Hippopotamus, Duck-billed Platypus, Llama, Hedge-hog, Anteater, Dugong.

12. Tell me the principal beasts of burden in India, in Arabia, in South Africa, in the Andes of South America, on the mountains of Spain. Why is the latter more useful for mountain journeys than the horse?

RECAPITULATION.

(FROM JULIUS CAESAR TO WILLIAM THE CONQUEROR.)

P. Before we begin the reign of the Tudors, I should like you to answer two series of questions on our old lesson. The first series will relate to the *people* and social events; the second series will relate to the *kings*, and "political" events.

FIRST SERIES.

THE ENGLISH PEOPLE.*

1. A long, long time ago, there were blue men in this island; for they stained their bodies with woad to frighten their enemies. What people were these?

2. The inhabitants of this island also wore skins for clothes; they provided their food from the fruits of the wood, and the flesh of animals which they hunted. What state do you say those people were in?

3. But, when they became more settled, and took care of the *tame* animals, and led them to graze on the green places, what do you say of their state then?

4. And when they sat still, watching their animals, and thought about the soil, and cultivated it, so that it brought forth food for themselves, what state had they reached then?

5. And when they thus became rich, and built themselves

houses, so that they formed small villages and towns, in what state do you say they lived then?

6. What result did the conquest by the ROMANS have upon the Britons?

7. What was the result of the departure of the Romans?

8. For what purpose did the SAXONS first come over to England, and what were the consequences?

9. To what places did the last of the Britons flee, after a struggle of 150 years?

10. When the Saxons settled in England, how did they divide the kingdom?

11. I remember how the Saxon people lived and were governed. How the farmers were called *churls*, and how each built himself a cottage "with a hole for the light to come in, and another for the smoke to go out," which cottage was generally in the middle of his allotment. I remember how the conquered prisoners were the slaves of the Saxons, and were called "Thralls," and worked on the farms which had once been their own.

I remember particularly how each Saxon churl was independent of any one else; how he was not tyrannised over by any noble or king, or compelled to pay any taxes, but would either give his own money, or go himself and defend his country without being forced.

* The answers to these questions should be written.

what system of government did they live?

12. I remember, too, something of the *laws* of this period; how a certain assembly of wise men used to meet, and think, and make laws. What was that assembly called?

13. I remember, too, some laws about trial and punishment, which, in these days, we do not think at all wise—we call them “superstitions.” Do you remember them?

14. And I remember how a missionary came from Rome to England. What was his name?

15. And, how, after that, there were plenty of bishops and priests, some of whom used to practise a *trade*. What was the name of the archbishop who was a smith, and could paint patterns for ladies’ dresses, and work all kinds of metals? He made two bells for the church at Abingdon.

16. Tell me something about the Danes;—their country, their manners, their habits.

17. Who was the first Danish king of England?

18. There was a king who introduced a new system of government into the country. Hear how he did it! 1st, He served the Saxons just as they had served the Britons. He said to them, “You are conquered!” and then he took their land away from them, making them work on their own property.

Just as the Britons had been made slaves and called “Thirls,” so the Saxons were called “Vassals.” There was, however, this difference—the

country was not divided into small lots called *allotments*, but into larger lots called *baronies*; and the barons did not have cottages in the midst of their lands as the churls had, but they lived in castles; the cottages were clustered around the castles. Do you remember that system of government? If you do, please tell me—

1st, What king introduced it?

2nd, Where did he come from?

3rd, What was the system called?

19. Before we talk of the effect of this system, a word or two on its *cause*. Do you remember why the barbarians could not hold “comitatus” so often, and what the chief gained by this? Do you remember how they first learned to pay their men with money, and why we now call fighting-men “soldiers?” Do you not see, also, how, when the men were paid, they were not independent, and that they did not receive their allotments as their own? If you have forgotten these things, it will be well to look back at the lesson.*

20. There were several reasons why this feudal system was a bad one. Pray tell me some.

When you have found out why this was a bad system, you may try and remember how it wore out; and the steps by which the poor depressed people again rose into power. We will do this another day.

* Vol. i. p. 321.

THE ENGLISH TRAVELLER.

THE LONDONERS.—WATER, FIRE, AND, LIGHT.

"MY DEAR CHILDREN,—

"What a long account of the Londoners did my friend give me that morning! He only answered two questions—'How do the Londoners earn their daily bread?' and, 'How are the Londoners fed?'

"Thirdly,' said my friend, 'How are the Londoners supplied with water, fire, and light?'

"Water.—Before the great fire of London, when the Londoners required any water, they used to go to the brooks, for there were brooks running through the principal parts of the city. But when the inhabitants became very numerous, the brooks did not yield enough, and continually became surrounded by the new houses which sprung up. Then the people thought that they would procure water from elsewhere, and in the thirteenth century they brought it from a place called Tyburn. It was conveyed through leaden pipes into large cisterns, called *conduits*. So the people went to the conduits instead of the brooks, and drew as much water as they pleased.

"Water was also procured from the river *Thames*; there were great water-wheels at London Bridge, which at one time raised 45,000 hogsheads per day; but the Thames water is not, and was not then, good for drinking. In the present day, the refuse outpourings of many cities, and the filth from

130 London sewers, is poured into it;

"So, about the end of Queen Elizabeth's reign (the beginning of the seventeenth century) a better plan was thought of. A Welsh gentleman determined to bring a river into London instead of the pipes. He found two pure springs in Hertfordshire, and formed an artificial river nearly forty miles in length; which was a work of immense difficulty and enormous expense. Although the gentleman, whose name was *Hugh Myddelton*, was very rich (for he was a goldsmith and a miner), he spent nearly all his property. Before he had finished, he was obliged to get help from King James I., for the whole cost of the work was about £500,000. At the completion, Mr. Myddelton was knighted—that is to say, he was called "Sir Hugh Myddelton," and his river was called the "New River." The New River Company supply the greatest quantity of water to London. But there are many other water companies now, and even ten years ago they supplied together 44,383,329 gallons of water per day.

"Water might be procured not only from the rivers, but from the springs under the London clay."

"But do the people want more water?" I asked?

"Yes," said my friend, 'in-

deed they do. Think how much water is wanted to clean such a mighty place as London! And, when fires happen, water is wanted to extinguish them; water is also wanted for the numerous manufactures; so that besides all that is required for the different houses, twice as much is used for other purposes.'

"Very good!" I replied. "Now tell me where the people get all their *firing* from. From the coal mines, I suppose?"

"True; but let us begin at the beginning. More than 500 years ago, coal began to be used in London. In the year 1316, the notion got abroad that the burning of coal was injurious to the health; and Parliament was petitioned to prohibit its use. Thirty years ago, no less than 1,500,000 tons per annum were used; but now, nearly 4,000,000 tons are burned every year. The enormous increase is in consequence of the gas used for lighting the streets, and the fuel used for the engines of the railways and steamboats."

"How are such quantities brought to London?" I asked.

"In different ways. It was till lately brought principally in ships called colliers. But now it is brought by railway. This year the Great Northern Coal Company has been selling coals to the London people at one-third less than before."

W. I think that that is very good of the railway-engines. Although they do eat so much coal, they make it cheaper.

L. "The manner in which London is lighted is an in-

teresting part of its history. In the fifteenth century, about the time when Whittington was Lord Mayor, lanterns were hung across the streets. In the course of time, glass lamps also were used. These lamps and lanterns were helped by certain link-boys, who bobbed about the streets with flaming torches. The old watchmen also used to carry lanterns, and nearly all steady persons, when they went out in the evening, took their lanterns with them.

"But at the beginning of the present century there came an invention which quite outshone all these things."

Jon. Ah! I know what he means—*gas!* Is it?

L. Let me read, then you will hear.

"There came a new light, brighter than any that had yet been seen—which burned without *any wick*—and never required snuffing. Neither did the new lamps require cleaning. This was the light of *gas*.

"The first gas-lights invented themselves. The most remarkable was that in the colliery at Whitehaven in Cumberland. While the miners were at work, a rush of strange-smelling air came past their candle, and burst into a joyful flame. It flamed away in such style, that the miners were frightened and ran off. But although the flame was six feet high and a yard broad, it burned in so orderly a manner, that they took courage, and flapped it with their hats; then it went out. This was one of the first

great gas-lights. But though it went out, curiously enough, it came in again whenever the candle came; so the only way to get it "out" in earnest was to get it outside the mine. Accordingly, a great tube was made to convey it up to the very surface of the earth. The gas, being light, was easily coaxed to go up there; so when it reached the air, it flamed away as brightly as before, and all the people went to see it. The first account given of it says that it had then been burning two years and nine months, without any decrease! So gas-light invented itself!"

W. So it did! But how did it get to London?

L. You shall hear. (*Reading.*) "London is not the first place where gas was burned. It made its first appearance before the public at Birmingham. In the year 1802, when the English nation was celebrating the return of peace, the gas-light was burned in the front of a great factory, where it made all the other illuminations look dim. Of course thousands of people came, and the report of it spread in the newspapers; and scientific men talked about it, and the people made experiments with it. It is said that, "all over the kingdom, coal was distilled in tobacco-pipes at the fire-side."

"But you have not brought the gas into LONDON, yet."

"Now, I am coming. It did not reach the great city very quickly. It was not until the year 1807 that it was burned in London streets. Being a new

invention, it had its enemies as well as its friends. It was found to have a bad smell, to cause head-ache, to spoil all the good furniture, and the colour of the curtains. But a certain good German, named Winsor, became its friend. He purified and improved it, and gave lectures about it, and established a great *National Light and Heat Company*, and raised £50,000, and spent it all; and at last raised a long row of lights in *PALL MALL*, the famous street at the West End;

"Then the people were astonished!" I said.

"Of course. But, like the coals, it met with difficulty in its progress. For some years *Pall Mall* was the only London street in which it was used.

"However, a good thing is sure to make its way at last. See how it is used now in all the squares, streets, alleys, and courts. There are more than twelve great gas companies in London. A new company, *The Great Central Gas Consumers' Company*, is supplying London with gas as cheaply as the Great Northern Coal Company is supplying the coals. There are about 200,000 tons of coal used in a year for making gas. There are four or five hundred lamplighters, and — the Londoners are an enlightened people.

"There! I hope, dear children, that you also are enlightened, for you have heard how the Londoners procure water, fire, and light. So say 'Thank you' to your industrious letter-writer,

"HENRY YOUNG."

ORTHOGRAPHY.

CHAPTER I.

USE OF GRAMMAR, LETTERS, SYLLABLES, AND WORDS.

L. We are waiting for our Grammar lesson, papa.

Ion. And we have been thinking—we are rather afraid that it will be uninteresting. Everybody says that grammar is *dry*.

P. Well, we shall see. Do you remember when we began to talk of the animals in this world?

W. Yes; you said that there are many thousands of animals. Since then we have arranged some of them into classes and orders—that was very interesting work!

P. So also there are many thousands of words. There are nearly 60,000 in our language, and it will be quite as pleasant to arrange them as to arrange the animals in classes. The "parts," and "qualities," and "different sorts" of some, are as interesting as those of an animal. Grammar is as pleasant as Natural History.

Ion. I am glad to hear that, papa. That point is settled; grammar is *interesting*. Now will you show us why it is *useful*?

P. Yes. You have been learning grammar, Ion, ever since you were a baby. I remember that when you first had a pocket-handkerchief pinned to your side, you called it a "*pochkey*."

W. That was not good grammar.

P. No, decidedly not. And Lucy called her first pocket-handkerchief a "*pofferhefersheth*."

There was a difference of opinion! but since you have learned grammar, you have both agreed to call it—

Ion. "POCKET-HANDKERCHIEF." Then I suppose you call that grammar—learning to pronounce our words properly.

P. Yes, that is one part of grammar. I need not tell you how useful it is. If all full-grown men were to speak as improperly as little children, there would be a "confusion of tongues" in every nation.

W. And I have learned something more since I was a baby; I have learned to use proper words. I used to say "*Willie* wants to go out for a walk," and "*Willie* is good;" but in time I learned to say "*I* want to go out." And something else:—I used to say "*I* is good," and "*You* is good," but now I know what words to use.

Ion. Yes. Papa corrected you and me too, or else mamma did, or else aunt, or the servants. So we have learned some grammar without any book. But I know now what are the uses of grammar; it teaches us how to pronounce our words, and what words to use. Or I can say it in a shorter way:—GRAMMAR teaches us to speak correctly.

P. It teaches you something else. Here is part of a letter which Miss Lucy wrote to me before she learned grammar:—

Priry ous. Clapton

Mi deer Par

*I hop u are quie wel.—Tel Arnt jain that
Weele as a bad corf, and dus not go to Skol.*

W. It is not spelt properly. Lucy calls papa a "deer."

L. But since I have learned grammar I have written "dear."

P. Now you may easily see what are the uses of grammar. You may say, "GRAMMAR teaches us to speak and write correctly." Shall I tell you what you will have to learn in order to do that?

Ion. Yes, please, papa.

P. You have, as you said, learned something of grammar already. In grammar we learn

(1st,) To make letters into syllables, and then to make syllables into words; this is called *spelling*, or, as we say in grammar, ORTHOGRAPHY.

W. I have always called it "spelling."

(2ndly,) You will learn the "qualities" of your words, so as to distinguish the different sorts from each other. And when you thus know them, you may arrange them into classes and orders (to remember them), just as you did the animals. This part of grammar we call ETYMOLOGY.

P. Etymology also teaches us the origin of words, or, as we say, their "derivation," but you will not begin this part yet.

L. Please let me say that once again. ETYMOLOGY teaches

us (a.) the qualities of words; and (b.) the arrangement of them in classes. We learned the uses of the animals next, papa, after we had learned the qualities.

P. So you do with the words.

(3rdly,) You will learn to use your words by making them into sentences; and you will make rules for using the proper words, and putting them in their proper places. This we call SYNTAX.

Ion. I think that the Syntax will be rather hard. But let me say the three parts of grammar.

1st, The spelling of words, called ORTHOGRAPHY.

2ndly, The qualities (or meaning) of words, called ETYMOLOGY; and

3rdly, The uses of words (their arrangement in sentences), called SYNTAX. Shall we begin to-day?

P. Yes. We will have a short lesson on Orthography.

Lesson 1. ORTHOGRAPHY.

You know what letters are. They are merely sounds; but all sounds are not letters.

W. No; the sound which the wind makes, and the sound of a cannon are not letters.

Ion. Please let me give the definition of a letter. A letter

is a sound which we use in speaking. And I will add something. People are sometimes a long way off from each other, so that they cannot hear such sounds, therefore they make different shapes upon paper to represent the sound. Here is a shape—a. Listen to the sound it represents. (*Ion makes the sound.*)

P. Very good; and you will find, if you take notice, that you can make that sound without moving your tongue or your lips. You can make it with your throat. Now make another in the same way.

Ion. e-e-e-e. I only used my throat then.

P. Now make another.

W. i-i. I did not move my lips or tongue.

P. Now another—

Ada. o. My throat did that!

P. Now another.

L. u. Ah! I did move my lips a little then! That sounds like a double letter; like "e-oo."

P. True. But it may almost be sounded by itself. Each letter which can thus be sounded by itself, without the help of another letter, is called a vowel. Thus *a*, *e*, *i*, *o*, and *u*, are vowels. There are two others which cannot be sounded by themselves, *w* and *y* (*oo-i*); these are sometimes used in a word as vowels.

W. Can we not sound any of the other letters by themselves. Let me try: *p*, *b*, *c*. No! the first is *pe* and *e* put together, *pee*; the next is *be e*, *bee*; the next is *se*, *se*. I will

count them up, *b*, *c*, *d*, *f*, *g*, *h*, *j*, *k*, *l*, *m*, *n*, *p*, *q*, *r*, *s*, *t*, *v*, *w*, *x*, *y*, *z*. Total 21! What are these letters called, papa?

P. They are called consonants.

W. Now then, I will make up a sentence about "letters."

"LETTERS are sounds used in speaking.

"These sounds may be represented on paper by different shapes.

"Five letters are independent sounds (that is, they can be sounded without the help of another letter); these are called VOWELS.

"Twenty-one letters are dependent sounds (that is, they cannot be sounded without the help of another); these are called CONSONANTS.

"The twenty-six letters of the English language form a company which we call the ALPHABET."

P. Now let us see what we can make with letters. Join together *b-a ba*. What is that?

L. I do not think it is a word, because it has no meaning.

P. No, here are three letters, *o-n-g*; here are four letters, *n-i-n-g*; here are five letters, *t-i-o-n-s*. In each case, the letters make a sound, but none of the sounds have any meaning. So we do not call them "words;" they are called "syllables." One letter also may be a syllable, such as *e-i*.

W. I noticed that each syllable has only the sound of one vowel in it. Now I will make a sentence about "syllables."

When one, or two, or three, or four, or five letters form a sound, without any meaning in it, we call such a sound a SYLLABLE.

Ion. And what do we call a sound when it has a meaning?

P. Then it is called a "word." I was going to show you that, just as letters make syllables, so syllables make words. Tell me a word—

W. Me, that is a word of one syllable.

L. I will tell you a better. It is better grammar to say *I.* That is a word of one syllable, and of one letter.

P. All the words of one syllable are called *mono-syllables* (which long word is made partly from the Greek *monos*, alone—just as we say *monarch* for a man who rules alone; a *monk*, a man who lives alone).

Ion. Here is a word of two syllables, "Wil-ly."

P. Such words we call *dis-syllables*.

Lucy. Herc is one with three syllables, "po-ta-to."

P. That is called a *tri-syllable*.

W. And here are some full-grown words—ther-mo-me-ter, Con-stan-ti-no-ple. What are they, papa?

P. All the words you find with more than three syllables, you may call *poly-syllables*.

Ion. Now let me make a sentence about words:—

When one or two syllables joined together have some meaning, they are called a WORD.

And we may go on to say that words are made into sentences; that sentences are made into paragraphs; that paragraphs are made into chapters, and that chapters may be made into books.

P. Yes; but all that does not belong to our subject, *Orthography*. Now let us finish the lesson. What does orthography treat of, Ion?

Ion. Of spelling;—that of letters, syllables, and words.

P. Name a LETTER—a vowel.

W. e. •

P. Name a consonant.

Ada. d.

P. Mention a SYLLABLE.

L. bo.

P. Now a word—a mono-syllable.

W. Boy.

P. Now a dis-syllable.

L. Butter.

P. Now a tri-syllable.

Ada. Vin-e-gar.

P. Now a poly-syllable.

Ion. Tap-i-o-ca.

P. Very good. I intend for you to have a "parsing exercise" at the end of each lesson, by which I mean that you are to take each word in a sentence, and say which class it belongs to. You may begin, to-day, by pointing out all the vowels, consonants, syllables, monosyllables, &c., in the following sentences:—

No. 1. PARSING EXERCISE.

(Write the number of vowels, consonants, syllables, monosyllables, dis-syllables, trisyllables, and polysyllables, in these sentences:—)

He that runs fast will not run long. Write injuries in dust and kindnesses in marble. All the days of Methuselah were nine hundred sixty and nine years. Constantinople is the capital of Turkey.

INDUSTRY.

(From Hickson's Singing Master.)

I re - mem - ber a lesson, which was not thrown a - way, Learn be -
 I re - mem - ber a lesson, which was not thrown a - way, Learn be -

times to be of use, don't spend too much time in play, Work a -
 times to be of use, don't spend too much time in play, Work a -

way, while you're able. Work a - way! Work a - way!

way, while you're able, Work a - way! Work a - way!

Hands were made to be useful, if you teach them the way,
 Therefore, for yourself or neighbour, make them useful every day.
 Work away, while you're able; work away! work away!

And, to speed with your labour, make the most of to-day,
 What may hinder you to-morrow, it's impossible to say.
 Work away, while you're able; work away! work away!

As for grief and vexation, let them come when they may,
 When your heart is in your labour, it will soon be light and gay.
 Work away, while you're able; work away! work away!

Let your own hands support you till your strength shall decay,
 And your heart will never fail you, even when your hair is gray.
 Work away, while you're able; work away! work away!

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

2nd Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO MADE A STEAM-ENGINE.

P. Some time before you were born, Lucy, the world did not know what was meant by a steam-engine. If any one went out for a ride, he wanted, first, a place to sit down upon; secondly, wheels for that place to be moved upon; and, thirdly, a horse to move the wheels.

W. Or else a donkey.

Ion. Or, he might ride in a dog-cart.

L. Or, in a sedan-chair. Then he would do without the wheels, and without the horse; two men would carry him.

P. True. I had forgotten those things.

Well! the world had been accustomed to move on in this way. Some were jogged along in waggons; some were walked along in sedans; and others were trotted along, when all at once men were startled by some strange news. They heard how they might ride in coaches which would almost fly along—at least, they would tear along over the earth in a style equal to that of the swiftest bird.

This was not all the news. It was said that the new coaches went without horses; but that no one would believe.

W. Of course not.

P. I was a boarding-school boy when I first heard the news; and, as I came home from the holidays, on the top of a coach, we passed a strange road with iron rails upon it. The coachman pointed them out to the passenger who sat beside me, and he laughed at them, saying, "Ah, ah! they will never do."

Ion. That was a railroad, I suppose?

P. Yes; it was one of the first that had been made, and the wonderful coaches the world had heard of were steam-engines—the coachman could not believe such things.

But the steam-engine soon let him know, and all the world too, that he was a wonderful fellow. The wind is a useful servant to man, for he drives great ships at a swifter speed than that of horses; but the steam-engine beats the wind. He moved great vessels across the mighty ocean, even in the face of the wind; he worked great machines in factories; he worked for the spinners, the weavers, the miners; for the printers; and did all sorts of work for all sorts of people. Then, as for his strength; he boasted of having a ten-horse

power; and some were said to have *forty-horse* power; and this they soon proved—so that people were *obliged* to believe that steam-engines were wonderful things.

Now, if the steam-engines are so useful, what sort of a man must he have been who made them?

Suppose we begin our “picture-gallery” with his life.

THE HISTORY OF JAMES WATT.

A delicate-looking boy was one day sitting down in a parlour, bending over the white hearth-stone, when one of his father's friends came in. The gentleman looked at the boy. He saw that he had a piece of coloured chalk in his hand, and was making marks on the hearth. So he said to his father, “Mr. Watt, you ought to send that boy to school, and not let him trifle away his time at home.”

“Look at my boy,” said his father, “and see how he is engaged, before you condemn him!” The gentleman looked, and was astonished; for the boy was busy in a difficult study. He was not playing, but hard at work.

W. Was he doing a sum, papa?

P. No; he was engaged in working *mathematics*—he was drawing lines and circles, and was working a difficult problem in geometry. The gentleman questioned him further, and the boy answered him like one who had been accustomed to think and learn. So the gentleman said to his father,

“Certainly he is no common child.”

The boy's father was a merchant and a ship-builder, living in the town of GREENOCK, in Scotland. He was one who liked work, and liked to see his son employed. He taught him writing and arithmetic, and his mother taught him reading. The boy did not need to be taught much else; he was always trying to learn, or else he amused himself with his father's tools. With them he made toys, and he even formed a small electrical machine.

This boy never liked to be still; he was always doing something. He was either observing something, or he was comparing things; or he was thinking about something; or he was listening about something, or he was imagining something, or he was making something; or else he was asking questions about something. He always had something to do.

When he was about fourteen years old, he went to see his aunt at Glasgow. His aunt, however, did not know what to do with so active a boy. It seemed as if he could not possibly sit still in a new place, which he had never seen before; when he saw his aunt's teakettle, he began to be busy; he took off the lid and put it on again; he held a cup, and then a silver spoon over the steam; he watched how long it took in coming out of the spout, and tried to count the drops which it made when it cooled. And when the tea things were cleared away, he would talk to his aunt,

and ask her questions. When the supper-time came, he began to tell her tales; he made her and all the friends around her listen. He told them a humorous tale to make them laugh, a sorrowful tale to make them cry; and even after ten o'clock, many an hour passed away of the time when they should have been sleeping. His poor aunt never had so much to think about before, and at last became very tired—so she was obliged to tell his mother, "You must take your son James home; I am worn out for want of sleep."

But when James Watt went home again, he still found something to do. How could he have eyes and not use them? He liked to *look into things*—he found a book on "natural philosophy," and he looked into that; he found books on medicine and anatomy, and these also he read. Then he went into the fields, and studied the flowers; he studied the various parts of his own body, and once he was found with the head of a child, which he was taking to his room to dissect. There was indeed very little that he did not examine.

In the course of time it became necessary for him to learn a business. He chose that of an instrument-maker, and was apprenticed for three years at Glasgow; where he had to make "theodolites," quadrants, and other perfect instruments which you do not understand. At Glasgow there is a University, a place where gen-

tlemen study languages, mathematics, and science. Of course, James Watt soon took an interest in that. He soon became known to the students, and they at once took an interest in him. As he was not very rich, he used to go to the college-gates with a box of "philosophical toys," which he had made; these he used to sell, together with some "candle bombs," so that he might get money and buy what he wanted for his studies. Poor lad, how much he wanted to learn! He was very "shame-faced"; he had not enough assurance to ask the students to buy. Yet he took all this trouble so that he might have the means of gaining knowledge.

At the close of his apprenticeship he went to London for twelve months, and in the year 1757 he returned to set up in business in Glasgow. Here he was hindered by a difficulty; he was not a Glasgow citizen, and the "corporation" of the city tried to prevent him from settling there. His friends in the University, however, took his part. They furnished him with a convenient room, and conferred on him the title of "MATHEMATICAL INSTRUMENT-MAKER TO THE COLLEGE OF GLASGOW."

Ion. Suppose he had been without friends, he would not have been able to settle there.

P. True. What a good thing it is to have many friends—to be such a character that all men can love you!

(Continued on page 33.)

MAMMALS.

RECAPITULATION.

P. To-day we will conclude our NATURAL HISTORY LESSONS; and, should there be time, you may begin your course on Botany.

13. What order of mammals are arranged in divisions according to their *tails*?

14. What order are arranged according to their *horns*?

15. Which are arranged partly according to the number of their *toes*?

16. Which are arranged according to the formation of their *feet*—forming the divisions “*digitigrade*” and “*plantigrade*” animals?

17. Give me the following six divisions of a certain order; and the name of the order itself.

1st Tribe, animals with retractile claws, elastic pads, great power of springing, eyes with pupils which dilate at night, and contract in a strong light.

The 2nd Tribe have “*vermiform*” bodies, sharp limbs, and a peculiar means of defence in the offensive odour they emit when attacked.

The 3rd Tribe have blunt claws, but very long canine teeth, great swiftness, and great sagacity.

The 4th Tribe are rather difficult to distinguish; their claws are semi-retractile; they have pouches containing a substance with an *agreeable* odour; and the pupils of the eye do not contract during the day.

The 5th Tribe walk on the

soles of their feet; they have rough, shaggy paws, massive bodies and limbs, and great power of climbing.

The 6th Tribe are amphibious; the body is fish-shaped; the limbs may rather be called *fins* or *puddles*, than legs.

Can you name these tribes and their order?

18. Tell me the names of six animals in the first three, and three animals in the last three of these tribes.

19. What is the tribe, order, and name of the animal which is most useful to the Greenlander?

20. What is the tribe, order, and name of the most useful animal to the Tartar?

21. I will describe some of the habits of our friends, and you may tell me their names. A certain animal comes down in the night when men sleep, and acts as a scavenger, clearing the streets of the Eastern cities; sometimes it attacks the sheep-fold, or even the graveyard, it is said. The animal is gregarious; large packs are often heard in the distance making strange cries, a shrieking or yelping. What animal do I refer to?

22. Go to the West Indies, and you may hear the distant noises of animals belonging to another order. When the sun is setting, you may hear them making a loud howling and weeping, as if they were bidding

it "Good-bye." What animals am I thinking of ?

23. What animals of the second order are peculiar to MADAGASCAR and the neighbourhood?

24. There are also some of the third order which are almost peculiar to Madagascar. They sleep during the day suspended by their limbs from the branches of the trees, looking like some strange fruit, and they are often knocked down and eaten as food. What sort of bats are they?

25. There is an animal with a neck which is long and thin ; therefore, having very little strength there, it defends itself with its *heels*.

26. There is another in the same order which has less strength in its heels, but has a more short, thick, and strong neck ; therefore it defends itself with the horns of its head.

27. A certain large mammal has no teeth, and a very small throat, not large enough to swallow a middling-sized fish ; it feeds on a minute kind of "jelly-fish" called the *medusa*. Instead of teeth, it has a curious apparatus like a sieve at each side of its mouth ; through this it strains the water which enters when it receives its food, and spouts it up through its nostrils. I remember, too, that as it cannot receive fresh air under the water, it has a large cavity containing numerous arteries. In these it retains the blood which is purified when it rises to the surface of the water and breathes. What is the animal's name?

28. How is so huge an animal kept warm in the polar seas?

29. Which is the smallest mammal, and in what order is it found?

30. Name the different animals of the rat tribe.

31. The different animals of the squirrel tribe?

32. Name all the torpid mammals you know.

33. And all that are amphibious.

34. I will name the exact position of an animal. It belongs to the animal *kingdom* ; the vertebrated *sub-kingdom* ; the *class* mammals ; the *order* of flesh-eating animals ; the *tribe* of seals ; it is known not only by its size, but by its large tusks. What is its name?

35. Name the tribe, order, class, sub-kingdom, and kingdom of the *shrew*.

36. Name the kingdom, sub-kingdom, class, order, tribe, and division of the *elk*.

37. In the same way mark the position of the *ichneumon*.

38. Also the exact position of the *pole-cat*.

39. Of the *hippopotamus*.

40. Of the *cat*.

41. Of the *orang-outang*.

42. Of the *opossum*.

43. Of the *dolphin*.

44. Of the *chinchilla*.

45. Of the *llama*.

46. Into how many "sub-kingdoms" is the "kingdom" of nature divided ?

47. Name them, and distinguish them.

48. Into how many "classes" is the sub-kingdom mammals divided ?

49. Which two classes have *warm* red blood?

50. Name the two classes with *cold* red blood.

We will now bid good-bye to our lesson on the mammals; and, for a time, to the animal kingdom. I hope, dear children, that the animals of which we have learned are now more interesting to you than they were at first. Not only is the history of their habits interesting, but it is pleasant to get a glance at THE WISDOM OF GOD; to see how He fits each animal for the climate in which it is placed, or fits them all for the different circumstances in which they live.

It is pleasant to think how each is fitted for his peculiar

food, and what strange changes are made in the limbs, teeth, stomach, claws, and feet; the senses, the frame-work, and coverings of these animals. I am sure you can now admire the wisdom of God more than you could at first.

Ion. Yes. When we had never studied the animals, the great difference in their parts seemed like confusion and disorder.

P. True; and now these differences only show you what order God keeps in his works; and that all are "fearfully and wonderfully made." Let us spend a few more minutes in beginning our new course of lessons on Botany. (See next page.)

WINTER, AWAY!

"AWAY, hoary winter! away to thy cavern,
On the wings of the storm, to the far rigid North;
Leave the land of the Thames and swift-flowing Severn,
To the adamant kingdom of icebergs go forth.

From the green hills of England and heather-crown'd rocks,
From her gay smiling valleys and tuneful woods, go!
Far away with thy petrified icicle locks,
To where rein-deer are cropping the moss 'neath the snow.

In thy iron-zoned vestment across the wide main,
On the hurricane haste to thy own native sphere;
With the hoar-frost, and vapours, and all thy cold train,
Stormy winter, away! on thy dark cloudy bier.

Come, glowing spring! soft, benignant, ethereal,
And thou god of the day! with thy earth-warming beams,
No more the tyrant, his ice-wand imperial,
Will exulting^{ly} wave o'er our rivers and streams.

Then come, gentle zephyrs, bright sunshine, and flowers,
Yonder lark thy glad welcome will chaunt through the skies;
Wren the garlands fair blooming on hedgerows and borders,
Through the air perfum'd incense will gratefully rise.

Over mountain and valley, and wide-spreading plain,
Lovely spring! throw thy mantle of bright vernal green;
Awake music's soft strains in the woodlands again,
While around us a roseate halo is seen.

Y. S.

BOTANY.

INTRODUCTION—DISTINCTION BETWEEN VEGETABLES AND ANIMALS.

P. When we began our course on Natural History, I pointed out the great difference between a vegetable and a mineral.

L. I remember, papa. We know a vegetable from a mineral, 1st, because it has life.

W. And 2ndly, it has organs to procure food, so as to keep up its life; for we found that the plant has not only to live, but to grow. We called such parts of the plant ORGANS OF NUTRITION.

Ion. And, 3rdly, it has death. Everything that lives also dies; it perishes, and becomes dust again.

P. True. When a plant dies, what must happen so that its species may not be lost.

W. It must either leave seeds or young plants to grow in its stead. Of course, if the plants could not produce others in their place, there would soon be none left; we called the seeds ORGANS OF REPRODUCTION. Now I remember that these were the most important distinctions—(1.) Plants have life; therefore (2.) They have organs of nutrition.

(3.) Plants have death; therefore (4.) They have organs of reproduction.

P. I may as well add the other distinctions for you. (5.) The parts of plants all depend on one another; if you break off a small piece of chalk from

a large piece, it still remains "chalk"—but, if you cut a flower to pieces, the parts cannot live separately. (6.) Plants have fixed and limited sizes; they cannot increase to any size.

Ion. That is true!

Then, (7.) Their shapes are all fixed, and are enclosed in a covering, or skin; the surface generally is smooth and rounded—they have no regular planes and angles as you find in minerals. You may add, also, (8.) That plants are not entirely one substance; they have not only solid, but fluid parts; and the order in which these parts are mixed is fixed.

W. But the greatest distinction, papa, is the life of the plant. Is it not?

P. Yes; this is a truly wonderful matter. The life, and the organs which sustain life. These "organs" have their duties to perform, or, as we say, their functions. Think! Inside a very little seed is a most minute germ; and, as it is said, "this minute germ builds up the beautiful form and wondrous structure of the perfect tree with scarcely any other materials than water and air. With these it not only constructs its own stem, leaves, roots, and flowers, but (what seems yet more extraordinary) it imparts to its seeds the same power."

Truly any plant is interesting.

RECAPITULATION.

(FROM WILLIAM I. TO EDWARD I.)

21. I QUESTIONED you concerning the FEUDAL SYSTEM last week. We are going to watch the decline of that system.

Suppose I tell you of a principle before we begin—(you know very well what is meant by a principle).*

It is a sure principle that anything, or any system, which is not true and just, will not answer long. It is “unsound,” so that the work of decay soon begins, and it becomes rotten. Here is another principle, which is very similar. When two parties are acting unjustly and quarrel, often they both lose; and other parties, who are not quarrelling, gain the advantage.

I will give you an instance. A certain man gained the crown of England by force, when he had no right to it. So the Norman barons said, “Your elder brother is the proper person to be the king!” and they quarrelled with him. Then the king, by fighting, weakened the barons, and the barons weakened the king; so the king to gain strength was obliged to please the people. He promised them permission to hunt in his forests; he raised a few Saxons to places of honour; and he said to them, “Stand by me against your hated Norman lords.” The barons did the same thing to get the help of

the people against the king. Thus both king and barons weakened each other (and got the people to help them), and the people gained strength. What was the name of that king?

22. There was another man who became king unjustly. He also put aside his elder brother, who was engaged in the crusades. So, because he had done wrong, and feared the people, he granted them a charter containing various privileges; he also granted privileges to the clergy and the barons. More than all, instead of marrying a Norman lady, he pleased his subjects by marrying a Saxon nun, called Matilda. Do you know that king's name?

23. In the times of these two kings, there were great wars in another part of the world. These wars were a great attraction to the barons of various countries; who were fond of chivalry and fighting. So, numbers left their estates, and some sold their property and went abroad. Thus the number of small baronies decreased, and great changes took place. What wars am I speaking of?

24. But, I remember how, in the next reign, the barons gained power again. The king was an usurper—decidedly! King Henry I. had left the crown to his daughter Matilda. This the king knew, but he said that he was more fit to

reign than a woman, and that he himself was William the Conqueror's grandson; accordingly he seized the crown. Thus, as before, the king had not many friends, and was not strong enough to rule the barons—who almost did just what they pleased. They fortified old castles, and built no less than 1,500 new fortresses. This time the people suffered; for all was disorder. The king was opposed by Matilda and some of the barons, while others took the part of the king. The barons made war on each other, and took their revenge *by plundering one another's vassals*. In what reign did all this happen?

25. Do you remember any of the cruelties they practised upon the people?

26. What was the name of the next king? Tell me why he was so powerful?

27. What did he do with the new castles to lessen the power of the barons?

28. To decrease the power of the barons, he was obliged also to get help from the people—what did he do to please them?

29. Henry II. was an ambitious king, and he had, you may remember, great possessions in France. He carried on wars in distant parts. We find, therefore, that for the sake of his own convenience, and the convenience of the barons, he made an important change, by which he got the whole command of the army into his own hands. In this way he also did much to destroy the feudal system.

What was the change he made?*

30. During the reign of Henry II., the class of people called *citizens* increased in importance. But in the next reign, the citizens were left at home to work and grow rich, and the nobles went abroad with the king; the king sold all he could possibly find to sell, and many barons sold all they possessed, and off they went to the crusades! Thus again the feudal system was weakened. In whose reign was this?

31. What unfortunate race of people suffered very much in this reign?

32. Tell me the name of the next king. He was the most cowardly and the worst of our kings; but out of his wickedness grew great good for the people. He treated the barons so badly, that they rose up against him. Then they forced him to establish the charters which his father had made, and to grant new privileges. The charter he signed, was the foundation of the English people's liberty. What was its title; and what was the name of the king?

33. Can you remember the name of the next king? He was as weak and foolish as his father, so the barons rebelled against him, and established the first House of Commons.

34. Give me your reasons for thinking that the House of Commons increased the people's power. How did it damage the feudal system?

* Vol. ii. p. 167.

ENGLISH TRAVELLER.

MORE ABOUT THE LONDONERS—"SANITARY CONDITION."

L. I WONDER what Mr. Young means by "sanitary condition." I have heard people talking about "sanitary reform."

W. There! you are just like a girl, Lucy! Now, I can tell you, because I learn *Latin* at school.

L. Well, what is "sanitary"?

W. The Latin word *sanitas* means health; so sanitary condition means healthy condition.

L. That does not seem to be sense! Let us read the letter:—

"MY DEAR CHILDREN,—

"By the sanitary condition of a city, we mean the different circumstances which contribute to the health of the inhabitants. For instance, when folks have plenty of *water*, they can keep themselves and their houses clean and 'sweet,' as we say. Then they are more healthy.

"And, when they have enough *fire*, they are not so likely to catch cold; then they are more healthy.

"And, when they have plenty of *light*, it contributes to cheerfulness and happiness. Light shows up the dirty places. So, when people have more light they are more healthy.

"Light! ah! that is a great blessing. A little while ago the Londoners had to pay not only for the gas-light which I spoke of, but for the light from heaven. They had to pay a tax for the windows, which let the

light into their houses. But the Government have lately found out that the sun-light belongs to all, so they have now abolished the window-tax. Poor people and rich people may have windows and light, as much as they please; and the Londoners have even invited all nations to visit them in 'a palace made of windows'!"

W. That is the Crystal Palace. What a good "sanitary condition" it must be in!

L. But here is more about Light.

"Light! ah, it is a great blessing! It is good for the *moral* health of a people—if you know what that means. In the times when the nights were dark, and the lanterns were few, there were many robberies and violent deaths; but dirty deeds cannot stand the light any more than dirty places; and it is said that the gas-light 'did half the work of the prevention of crime.'

"Thus you see that the water, fire, and light, which you heard of in my last letter, relate to the 'sanitary condition' of a people. But I must proceed with my friend's account. 'I mentioned,' he said, 'the washing and cleaning when we talked about the water of London. I should have told you, that the men who are for making a sanitary reform in London caused an Act of Par-

liament to be passed in 1846, for establishing public baths and wash-houses, in which poor people may keep themselves and their clothes clean. These institutions have been very useful.

"The sewers, also," he said, "relate to the sanitary condition of the city; for if all the unwholesome filth be not cleared away, it will make the air impure, and the people unhealthy."

"The paving of the streets also relates to the people's sanitary condition; for if the foot-paths be dirty and clayey, and full of puddles, bad vapours arise, which make the air impure, and the people unhealthy."

"The burial-places of the people also relate to this subject; for if dead men be allowed to rest in the cities with those who live, bad vapours arise from their bodies through the earth, spreading disease and the seeds of death in the air."

"Let us talk of the sewers first. The sewers of London are the most remarkable in the world. They extend to a great depth under the earth, and some of the main sewers are of enormous size. On each side of most streets there is a gutter, and at certain distances in the gutter there are iron gratings. Through these gratings the gutter-water pours on rainy days, carrying with it the dirt from the roads."

"And where does it all go to?" I asked.

"Ah! where do you think?" said my friend—"it goes into the dark! Down it goes, gurgling

along, through winding drains, into the broad main-sewer; and there, in the dark, in company with all manner of filth from all manner of places, it rushes along, and rushes on, until it reaches—where do you think?"

"I can't say!"

"The RIVER THAMES. The fine old Father Thames has to receive it all; whether agreeable to himself or not. Ah, how it must spoil the flavour of his water! For do you know that 130 great sewers are all day long discharging their dirty contents into his "bosom." Every day they pour forth about 30,000,000 gallons, or 130,000 tons of filth. It is too much—really."

"Those who think much about 'sanitary reform,' say that the noble river Thames should not be dirtied in this way, and that, instead of doing harm, this refuse might be made to do good. It is proposed that two vast "subterranean" canals should be dug—one on each side of the river, and that by these canals the water should be conveyed far into the country, where it might be used to make the corn grow for all good people, and the grass for the sheep and cows. Would not that be a more sensible plan?"

"There! I have written nearly to the bottom of the paper, and I think that my letter is long enough for any boy or girl to read. So I beg to leave off, and remain,

"Your affectionate friend,
"HENRY YOUNG."

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS—NOUNS AND ADJECTIVES.

W. I like grammar!

Ion. So do I, really. I have written down the last lesson on a piece of paper, and have committed it to memory. Hear me say it.

ENGLISH GRAMMAR.

Memory Lesson 1.—DEFINITION, &c., ORTHOGRAPHY.

1. GRAMMAR teaches us how to speak and write correctly.

2. In order to do this, we must learn—

(a.) Spelling, or ORTHOGRAPHY.

(b.) The "qualities" of words, and their different sorts, so as to arrange them into classes; this is called ETYMOLOGY.

(c.) The "uses" of words, in different parts of a sentence; this is called SYNTAX.

3. ORTHOGRAPHY relates to letters, syllables, and words.

4. A letter is a sound; there are two sorts, viz., the five vowels, and the twenty-one consonants; thus the English language has twenty-six letters.

5. A syllable is a sound without a meaning, formed by one or more letters.

6. A word is a sound with a meaning, formed by one or more syllables. Words have different names, according to their lengths, such as "monosyllables," "disyllables," "trisyllables," and "polysyllables."

P. I have been listening to that lesson, Ion, and think you said it very well. You may all commit it to memory. Now for some Etymology.

Lesson 2. THE NOUNS.

P. Etymology relates to the "qualities" of words. I think as you have had so many "Object lessons," you ought to be very expert in finding out qualities.

Ada. So we are!

P. Hitherto you have observed the qualities of things; these you can discover with your senses. But how will you discover the qualities of the words?

W. Oh, perhaps we shall feel them. Will you give us some to try?

P. Yes; here is a collection of words with different qualities. I shall not tell you how many sorts I have mixed up; but if you arrange together all that are alike, you will see how many classes they will make.

Boy—sheep—blue—wisdom—wonderful—small—goodness—leaf—wind—pretty—horror—Jupiter—young—lady-bird—greasy—Constantinople—intemperate—rubbish—exhilarating—invigorating—sheet—warm—water—cure.

Now, do what you can with those words. If you want to observe, you must use your mind's eye—think.

L. We have arranged them, papa. We only make two classes—

Class 1.—Boy, Sheep, Wisdom, Goodness, Leaf, Wind, Horror, Jupiter, Lady-bird, Constantinople, Rubbish, Street, Water, Cure.

Class 2.—Blue, Wonderful, Small, Pretty, Young, Greasy, Intemperate, Exhilarating, Invigorating, Warm.

L. But we cannot tell exactly the difference in their qualities. I only *feel* that there is a difference, for I can put “the” before any in the first class. Thus—“the boy”—“the wisdom”—“the goodness”—but there is no such thing as “the blue,” or “the greasy.”

P. No; there is no such *thing*.

W. Ah! ah! I see something, papa—the first are all THINGS! There is such a thing as *boy*, or *sheep*, or *wisdom*.

P. Wait a minute, Willie! Grammar does not teach us of objects, or things, it teaches of words. There is all the difference between the great *object* boy, and the little *word* boy.

Ion. To be sure. They are not the real things; they are all the *names* of things. What are we to call such words?

P. All words that are the names of things, are called NOUNS.

L. But are all in the first class names of *real* things, papa?

Wisdom, and goodness, and horror, are real things, although we cannot see them with our eyes. But is *Jupiter* real?

P. No. Jupiter is the name of a heathen God; there never was such an individual—he was only imagined.

W. And there are no such persons as the *fairies*—Queen Mab, Friar Puck, Jack the Giant-killer, and the Liliputians; they are imaginary people.

P. True. Yet the words which represent them—their *names*—are NOUNS.

W. Then, I know now what a Noun is; I will make its “definition.”

A noun is a *name*—that is all!

P. True; but you may make your definition a little longer.

W. Then, I will say—

Definition—A word which is the name of any real or imaginary thing is called a NOUN.

Example—Girl, undertaking, rudeness, Apollo, Friar Puck, Willy.

L. Yes! and the way to be sure whether anything is a noun or not, is to think what the word represents, and to ask—“Is it really a *thing*?” You can’t make a mistake then.

P. You may now perform your “Parsing Exercise.” Find out how many of the words in the underwritten exercise belong to the class nouns.

No. 2. PARSING EXERCISE.

(Write all the Nouns in these sentences.)

John of Gaunt, Duke of Lancaster, a baron of the times of the feudal system, lived in a great castle. The pig is used for food. Horses, cows, sheep, antelopes, deer, dromedaries, and other animals, eat vegetable food.

Lesson 3. THE ADJECTIVE.

L. I think, papa, I should like another lesson before you leave off. I should like to see why the words in the second column are all alike.

P. Very well; proceed.

W. I have been noticing that they may all be used with the nouns. Try any of them! You may say *small* leaf; or *warm* water; or *pretty* sheep. So they show *what sort* of things the nouns represent.

Ion. Yes; I have noticed that they all express "qualities;" and if you add one to a noun, it shows directly that the noun has that quality.

P. That is quite true. Such words are very easy to understand; and because they are added to nouns they are called *Adjectives*.

L. Then I will make the "definition:—"

A word which is added to a noun to show its quality is called an **ADJECTIVE** — such as *small*, *warm*, *pretty*, *invigorating*, *young*.

P. Have you any other remarks to make on the adjective?

Ion. I notice a great difference between this class and the nouns. You can use a noun by itself; you may say *horror*, *wisdom*, *goodness*, *boy*; but if you try to use an adjective by

itself, it has no meaning. For instance: the *small*, a *warm*, a *pretty*—that is nonsense.

W. Ah, papa! I have such a good thought! These classes of words are just like men, all the world over. They are dependent, and independent. There is a class of men called servants, who are dependent; and there are masters, who are independent. The adjective is the noun's servant; for you see it is dependent on him—it follows him to show his quality.

L. So it is, Willie; and now we have heard of dependent *letters*, dependent *syllables*, and dependent *words*. Let me say them over.

b is a dependent *letter*, because it cannot be sounded without the help of a vowel.

a is an independent *letter*, because it may be sounded by itself.

oy is a dependent *syllable*, because it has no meaning by itself.

boy is an independent *syllable*, because it has a meaning by itself (and is thus a "word").

small is a dependent *word*, because it cannot be used by itself.

girl is an independent *word*, because it has a meaning by itself.

P. You may now attend to your parsing exercise. Draw a line under all the adjectives you find, or write them on a slate.

No. 3. PARSING EXERCISE.

My dear, good, kind, and affectionate mamma, you have a nasty, tiresome, troublesome cough. The good doctor cured the bad cold which I caught in the wet weather.

THE FOREIGN TRAVELLER.

TURKEY.

"MY DEAR CHILDREN,—

"I landed at Constantinople with the Greek merchant.

"I dare say you remember our conversation. You know that the city was so called after Constantine the Great, who established the eastern empire of Rome here. (The ancient name was Byzantium.) You learned that the city is situated on a triangle, and that it is said to be built on seven hills, in imitation of ROME. You heard, too, of the beautiful Bosphorus, which leads into the Black Sea; and of the appearance of the city from the water. I wrote to you also concerning the *Golden Horn*; the *New Seraglio*, which forms a "city within a city;" the *Mosque of Solyman the Magnificent*; the ancient *Aqueduct*; and the slender *Watch-tower*. Another remarkable place in the city is the *Hippodrome*, formed by the Greeks for horse exercises, and racing. This large open space is 400 paces long, and 100 paces broad. It is said that altogether Constantinople and its suburbs contains 14 imperial mosques; 200 ordinary mosques; 300 chapels; 80 bazaars; more than 500 fountains; and about 100,000 houses; so that you may imagine it to be a very large place.

As, led by the Greek merchant, I wended my way up some of the narrow streets, I cannot say that I was pleased. After

the view of the city from the river, a scene, said to be the most imposing and magnificent in the whole world, I was grievously disappointed at the narrow, crooked, dirty, ill-paved streets. There were also large spaces strewn with blackened ashes, which told tales of fires that had recently happened. Soon I began to be very angry. I had to pick my way up steep, slippery places, midst filth of all kinds, and midst dirty, mangy cur-dogs, who were snarling over some putrid substance. I was at once reminded of the accounts of Eastern cities, and the scavengers—the jackals.

"The houses of these streets were light and gaudy; they were composed of light timber, and the spaces between the timber were generally filled up with earth or brick. They are very combustible, and very fragile; and if they escape fire, they seldom last more than thirty or forty years. According to the customs of the East, men and women are separated; so, each house is divided by a very narrow passage; one side of the houses belong to the women, and the other to visitors and friends.

"The 500 fountains in the city pleased me more than the houses. The number of these fountains may be accounted for, 1st, because of the Roman aqueducts, from which a good

supply of water is obtained; 2ndly, according to the custom of the Turks, and the Mahometan religion, frequent baths and washings are necessary.

"The inhabitants of Constantinople next engaged my attention. There is a great variety of people; the principal kinds are the Mahometans, the Greeks, the Armenians, the Jews, and the Franks. The name 'Frank' is applied to most foreigners—English, French, Russians, Arstrians, and others are all called Franks; they visit each other frequently and live on friendly terms. They are thus separated because they are not Mahometans, but the separation causes them to forget their national differences, and to be more sociable.

"Amongst so many different races, the different *languages* heard are amusing; indeed nearly *all* languages are spoken in Constantinople. The variety of *dress* is almost as great as the variety of language. The colour of the boots is an important distinction:—the Mahometans wear yellow boots, the Armenians red, the Greeks black, and the Jews blue. The wives of the Turks and the Armenians are dressed alike—they never appear in the streets

without a veil which hides their faces.

"The *characters* of the various people are also as different as the colours of their boots. You see this more particularly when doing business with them. It is said that the *Armenians* and *Turks* seldom ask too much for their goods; the *Greek* merchants and the *Jews*, however, are crafty, and not to be trusted. These people meet in the public market-places, or *besestins*, as they are called.

"My guide, the Greek merchant, knew many of them, but I had no wish to make their acquaintance; for, so far, all was disappointment. I had heard much of the Turkish cemeteries, and thinking they would be even more pleasant than the city itself, I resolved to visit them.

"The next morning, while breakfasting at the 'Table d'hôte,' I met with a Russian Countess, an agreeable chatty lady. As, like myself, she was a 'Frank,' we soon got into conversation; and finding that she was going to the cemeteries, I offered to accompany her, and was accepted. Next week you shall hear of our visit, from

"Your affectionate friend,
"UNCLE RICHARD."

FRIENDSHIP.

Who seek a friend should come disposed
To exhibit in full bloom disclosed
The graces and the beauties
That form the character he seeks,
For 'tis a union, that bespeaks
Reciprocated duties.

COWPER.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

3rd Week.

MONDAY.

Moral Lesson.

INDUSTRY.

THE MAN WHO MADE A STEAM-ENGINE.

P. Let us think of James Watt, the MATHEMATICAL INSTRUMENT MAKER TO THE COLLEGE OF GLASGOW.

His friends in Glasgow soon increased. Very learned men and great men of the college became his friends. One celebrated professor was delighted with him. He says, "When I was introduced to Mr. Watt, I only expected to find a workman, but was surprised to find a philosopher, as young as myself, and always ready to instruct me. I had the vanity to think myself very proficient in my studies, but I was rather mortified to find Watt so much my superior. Whenever any puzzle came in the way of us students, we went to Mr. Watt. Everything became to him *the beginning of a new and serious study*; we knew that he would not quit it until he had discovered its insignificance, or made something of it. In order to read a certain work, he learned the *German language*; and so did I, to know what he was about."

Thus you see how useful a good man may be by his example.

W. Yes, I dare say that the professor would not have taken

the trouble to learn German, if he had not seen Mr. Watt doing so.

P. In another part of this gentleman's letter, "you may read of a quality in Mr. Watt which I am sure you will also admire. It is said—

"Watt's superiority to us all was hidden under the most amiable candour, in allowing merit to every man." Do you understand that, Willie?

W. Yes; that means that he thought other people to be as good as himself.

P. True; and here is something better. I will read it:—"He would often surmise things which others would only carry out, yet he would ascribe *the whole merit* to their ingenuity."

How different was Watt from many other men! Have you not sometimes noticed how anxious men are for the world to know of all they have done! They wish to get very great praise for themselves, and "to make a noise in the world."

L. Yes. You once told us, papa, that "empty vessels make the most sound."

P. But Watt, you see, was anxious only to do good, and he willingly gave to others the praise. How much better that

is! After he had been in Glasgow six years, he married his cousin, and was allowed to set up in business in the city, as an instrument-maker: his importance was thus increased. He became an engineer as well as an instrument-maker—and it is said that "he was consulted in the construction of canals, bridges, and other large works requiring skill." You can understand how delightful such pursuits were to Mr. Watt. In everything he did, he worked at it with all his heart, for every new engagement was, as you heard, *the beginning of a new and serious study*.

With this habit of mind, nothing came amiss to him. For instance: he was quite unacquainted with music; he had never been able in his life to sing, or play on any instrument, yet he one day astonished all his friends, by producing a fine *organ*, which he had built, and which contained many improvements. When some musicians played upon it, they found that it had a wonderful power of producing sound. What a thoughtful man he must have been to make this! You may now understand how pleased Mr. Watt would be, when, in the midst of his engagements, his attention was drawn to a model of a *steam-engine*. He had heard of steam-engines before, and—

Ion. But, papa, did not Mr. Watt *invent* the steam-engine?

P. By no means. There had been many steam-engines before his time. I think you would like to hear their history.

Nearly two thousand years ago, a Greek writer named *Hero*, who lived in Alexandria, in Egypt, described a toy which he had invented, and which had been moved by steam. In A.D. 540, an architect named *ANTHEMIUS* shook a house by the power of the steam from several cauldrons of water. On the 17th June, 1543, a man named *BLASCO DE CAROY* made a fine experiment in Spain; he procured a ship of 209 tons, and put it in a great cauldron of boiling water, with a moveable wheel on each side of the ship, by which he moved it; the experiment succeeded, but no one saw its value, and it was forgotten.

In the year 1663, the first idea of a steam-engine came out in England. The *MARQUIS OF WORCESTER* published an account of one in a book. After describing it, he says—

"I call this a semi-omnipotent engine, and do intend that a model of it be buried with me."

L. That seems very selfish! I wonder what that was for.

P. I cannot say. He afterwards invented another engine, for draining all sorts of mines, which he declared to be "the most stupendous work in the whole world."

This engine of the Marquis did not come into use until about thirty years after his death, when *CAPTAIN THOMAS SAVARY* brought into use an engine for draining mines—which he styled "*The Miner's Friend*."

The engines of Savary, how-

ever, were not perfect; but in the year 1705 they were greatly improved by two Englishmen—THOMAS NEWCOMEN, an ironmonger, and JOHN COWLEY, a glazier. They constructed a machine in imitation of one by a Frenchman named PAPIN. This was altogether superior to any that had yet been made; it soon became very popular, and all over the country it was used for draining mines, for driving mills, and many other purposes.

It was a model of Newcomen's engine which Mr. Watt met with when he was in business in Glasgow. Can you not imagine the man as he first sat down to examine it? "Ah!" he would cry aloud, "I have *something* here to look at!" and he would at once "make it a new and serious study." How carefully he would move all the parts to see how they acted! Then how slowly would he take it all to pieces, that he might repair the broken part—for it had been sent to him to be mended. Soon every part was thoroughly investigated; it was repaired, put together again, and made to work. When he was a boy and counted the drops from the steam of his aunt's kettle, he had learned to think; and from the habits he had then formed, it was easy to understand the machine before him. He seemed to feel a relationship for the whole thing—he took to it naturally, as a duck does to the water.

It is likely that he had much greater knowledge than that of Newcomen. He had, of course, profound mathematical know-

ledge, and he brought that to bear on the engine; he had a knowledge of mechanics, of chemistry, and of nature's secret laws; and all this was useful to him. He "rummaged" the vast stores which he had been laying up since he was a boy, and brought out old thoughts to improve his new friend.

Soon an improvement in one part was made; the defects of another part were seen, and they were remedied. A third part was altered, and before long he made a fresh model, which was in many points more perfect than that which he had repaired. He set to work to think more yet; he calculated "how much the water dilated in passing from its liquid state into steam; he discovered how much water a certain weight of coal would vaporize; how much vapour was expended for each stroke of the engine; and, lastly, the difference in the elasticity of steam at different temperatures.

It is said that these difficult questions would have occupied the lifetime of many a laborious philosopher. But they did not cost so much to Watt. When do you suppose he performed all this work? It was principally done *after his hours of business*, without interfering with the labours of his workshop. Perhaps you can tell me when he formed such habits.

W. Yes; when he was a boy—they grew up with him.

P. And that is the reason they were so strong; they were begun in his boyhood. You shall hear more of his model next week.

(Continued on page 49.)

CHAPTER I.

THE DISTINCTIONS OF PLANTS.

P. LAST week I finished our lesson with some remarks on the *life* of a plant.

Ion. You were speaking again of the *conditions of its life*. You said that it must have *organs*, and that the organs must perform certain *functions*.

P. True. We said how remarkable is the function of these organs to convert water and air into a beautiful tree—the “function of nutrition,” as it is called. They have another important function. By means of these organs the plant can resist the action of the elements around it.

W. What would “the elements” do if the organs did not resist?

P. They would cause it to decay—but as long as the organs perform their functions of growth, they can resist such action. Suppose, however, that you break off a twig from a tree—the organs in its leaves, and stem, lose their connection with the root.

W. Yes, that is certain.

P. Then they cease to perform their functions; the leaves fade and wither, and the stem becomes shrivelled. The twig can no longer resist the action of the air, which, in the course of a few years, reduces it to dust again.

W. While perhaps the fellow twig—the one which grew beside it—has by that time become a great sturdy branch, caring

36

nothing for wind or weather; but that branch cannot always grow.

P. No; as I said, everything that lives must die. It cannot perform its functions for ever; and directly the sturdy branch ceases to grow it begins to die.

L. I understand that. Just like the twig which was broken off; its *organs cease to perform their functions*; they cannot feed on the gases of the air to support life, so other gases feed on them and cause their death.

P. That is pretty near the truth. And this leads us to a third condition of life; *it is limited*. Some plants grow up and die within a year; they are called *annual* plants. Others grow and die within two years; they are called *biennials*. Others do not live more than three or four years; while the giant, slow-growing trees live hundreds, and even thousands of years. But it has been supposed that the Creator has fixed a limit even to the number of years of their long lifetime. Now repeat the distinctions of a plant.

W. I think I can say them.

A PLANT has (1.) *life*, therefore it has (2.) *organs* which have the *function of nutrition*, and the *function of resisting the surrounding elements*.

But the organs cannot do this for ever; therefore it has (3.) a limit to its life, or, as we say, *death*.

In this way all plants might die; so we find that they have (4.) organs of *reproduction*, which we call seeds.

There are other interesting points in plants. (5.) Their parts depend upon one another; (6.) they consist of fluid and solid substance; (7.) their substance is always surrounded by a covering, or skin; (8.) they are limited in size; (9.) they are fixed and decided in shape. You cannot say any of these things of a mineral, which never has life.

Ion. Before you begin to describe the parts of a plant, papa, I want to ask something.

You said when plants cease to grow they begin to decay. Do the trees grow in winter?

P. No; but here you may see a curious law, like that you see in the animals: the trees may be almost said to be asleep. The functions of the organs are stopped, or suspended, as we say, until the sun warms them, and sets them to work again.

Ion. Then in the winter the trees are like the torpid animals.

P. True. There is another instance in the vegetable kingdom, where there seems to be life, yet the organs do not perform their functions. You may keep a seed for many years; during all this time the little organs within it are quiet, and remain in the same condition. Yet it cannot be said to be *dead*, for you know that if you put it in the ground it will form a new plant. Its organs of nutrition will perform their functions as soon as sufficient heat and moisture have acted upon it, and have awakened it.

W. We may say, then, I suppose, that it has life, but it is not in circumstances to act; it is sleepy.

P. *Dormant* we say; the live seed lies in a dormant state, just as a live animal lies in a torpid state.

TO MY BROTHER.

We are but two—the others sleep
Through death's untroubled night;
We are but two—oh, let us keep
The link that binds us bright!

We in one mother's arms were locked—
Long be her love repaid!
In the same cradle we were rocked,
Round the same hearth we played.

Our boyish sports were all the same,
Each little joy and woe;
Let manhood keep alive the flame
Lit up so long ago.

We are but one—be that the bond
To hold us till we die;
Shoulder to shoulder let us stand,
Till side by side we lie.

CHARLES SPRAGUE.

RECAPITULATION.

35. The king who succeeded Henry III. was determined and brave, and as the barons had corrected his father, so he determined to correct them. How did he do so?

36. This king conquered Wales, and tried to conquer Scotland. His armies consisted more of paid soldiers than of "vassals." How did such armies influence the feudal system?

37. What king was so foolish that the barons rose against him and put him to death?

38. What was the name of the next king? You may remember that he paid more attention to foreign wars than to his people. He conquered the French at *Crescy* and *Poictiers*.

39. What was the name of the son of this king? He died before his father.

40. What relation was Richard II. to Edward III.? What was his character?

41. The next king was a usurper; but he made good laws for the improvement of his people. What was his name?

42. You may remember how, when the kings wanted great armies, they were obliged to hire "soldiers," and that the nobles had to pay "scutage"; and that the chief business of the people's representatives in the House of Commons was to grant "supplies." What celebrated war in the time of Henry V. was thus a great expense to the people?

43. What dreadful civil war

was carried on in the reign of Henry VI.? Who was Queen Margaret?

44. What cruel king succeeded Henry VI.?

45. What was the name of Edward IV.'s son? and what was his fate?

46. Richard III. was, you may remember, a wicked king, although he made some good laws. Where did he die?

By thinking over these reigns, dear children, you may see something of the principle which I mentioned to you. You will see that whenever a king gained the crown unjustly the power of "the crown" was thus weakened, and the people gained new privileges. You may notice, too, how the barons and the king weakened each other by these contests, and depended on the help of the people.

47. Who was the last of the exceedingly powerful barons? Tell me something of the number of his retainers, and of the quantity of food they ate.

48. What good Saxon queen built an *arched* bridge at Stratford?

49. Why was that place afterwards called *Bow*?

50. In whose reign was the first *menagerie* established at Woodstock?

51. Mention the six great cities which were much injured by fires in the reign of Henry I.?

52. What custom did the

clergy take great dislike to in Henry I.'s reign? What did one of the clergy do with the pair of scissors he had under his robe as soon as he had finished his discourse?

53. What did the people wear in the very next reign?

54. Can you tell me anything about the marriage customs of the early Saxons?

55. In whose reign did the Flemings introduce the woolen manufacture?

56. In the reign of a certain king *Windsor Castle* was built; *tolls* were established; the first *speaker* of the House of Commons was appointed; and laws were made to restrain the people from *extravagance in their food and clothing*. In the same reign *groats* and *half-groats* were first coined, and the Flemings introduced the *art of weaving cloth*. In what reign did this happen?

57. Mention the ten most remarkable erections made in Edward III.'s reign?

58. What *islands* were then discovered?

59. What three celebrated *mottoes* were adopted, and how?

60. What celebrated man became *Lord Mayor* of London in Henry V.'s reign?

61. In whose reign did the celebrated John Wickliffe begin to preach?

62. What name has been given to John Wickliffe; and what were his followers called?

63. In what year did four clergymen make the first attempt at popular education?

64. Name the four parishes in which public schools were established.

65. Name the five other parishes in which "grammar-schools" were begun in 1455.

66. What is the name of the good man who introduced printing into England?

67. Tell me the name of the German who invented printing.

68. Tell me the name of the first printing firm in the world.

69. Mention two kings who were great patrons of music.

70. I am going to talk about some remarkable people: tell me their names. A certain king was noted for his great learning. What was his name?

71. There was a queen who was present at twelve pitched battles. Her name?

72. Another queen. When her husband died, she married a Welsh gentleman named *Tudor*.

73. There was a man who was the king's friend until he became an archbishop; he then became the king's enemy. What was his name?

74. A certain man was the favourite of a weak king, but the barons took him prisoner, and put him to death.

75. An archbishop who led a party of barons against the king?

76. Two kings whose deaths were caused by an arrow.

77. A king who reigned 56 years?

78. What unfortunate prince was twice deprived of his right to the crown by a younger brother?

79. What did his youngest brother do to him at last?

80. How many Plantagenet kings were there? and in what battle was the last of them killed?

THE ENGLISH TRAVELLER.

LONDON—"SANITARY CONDITION," HIGHWAYS, BURIAL-GROUNDS.

"*My dear children,—*

"*We are going to consider the pavement of London. It is a rather stony subject; but never mind—it is smooth, and that is something."*

W. Yes, we shall get over it easily.

"*It is generally wide, also. The footpaths are paved with a calcareous* stone; and at the edge there is a harder and rougher curb-stone of granite. Some parts of the footpaths are formed of a hard, pitchy, and gritty substance, called Asphalte.*

"*The roads in the busy places are paved with rounded blocks of granite. These are laid upon a foundation of compost, driven down level by men with heavy rammers. The poor fellows work very hard, and every time the rammer falls the man makes a sort of grunt—ugh! Other parts are covered with small broken pieces of granite, which in time are forced into the earth by the wheels of the great carts and omnibuses. When a road is made in this way, it is said to be M'Adamised, because the gentleman who invented the plan is named M'Adam.*

"*A few years ago some people thought they had made a wonderful discovery in paving the roads. It was found that wooden blocks, if laid close*

together, made a firm hard road, and were even as durable as blocks of granite! It was said, too, that such beautiful and level pavement would decrease the wear and tear of the carriages, and would lessen the dust and noise. Very large sums of money were spent in laying down this pavement. The noise was lessened, there was less dust, and it was much better for the carriage. But, alas! before long it was discovered not to be better for the poor horses. In wet weather they slipped and stumbled, and some poor animals broke their legs. The defect could not be remedied; and the wood pavement was taken up again. It only remains now in a few places.

"*I explained to you how the BURIAL-GROUNDS relate to the "sanitary condition" of a city. An Act of Parliament was passed in 1850, forbidding burials in cities; and now the greater part of the dead are taken to large burial-grounds called cemeteries, which are in the suburbs of London.*

"*The oldest of these places is Kensal Green Cemetery, which contains forty-eight acres of ground, and is beautifully planted with trees, shrubs, and flowers. This was opened in 1832. In 1838 Highgate Cemetery was opened; and, since then, many others have been established. Lately a very large one has been formed at Erith,*

* See PLEASANT PAGES, vol. i. p. 77.

in Kent. This village is many miles from London, and is situated on the banks of the Thames. The health of the London people will be very much improved by the removal of the bodies. It is supposed that *hundreds* less will die every year."

"So much," said my friend, "for the sanitary condition of the Londoners! The talk we have had concerning the roads and pavement reminds me of another interesting point."

"What is that?" I asked.

"The MEANS OF CONVEYANCE. In so large a city, it is not always convenient to walk; thus, the inhabitants have from the earliest times been carried in various ways. At first the principal conveyances were boats; there was much more travelling by water than by land. There were once 40,000 watermen on the Thames, who conveyed the good citizens in little wherries. The mode of travelling through the streets was at first on horseback. Nearly all the rich citizens and the courtiers had a horse: the goods were conveyed on pack-horses. In 1564 the first *coach* appeared, and in 1634, the first hackney-coach stand was established. It consisted of four hackney-coaches, which belonged to Captain Bailey, a naval officer. They stood in the Strand, near Somerset House. In the same year, sedan-chairs were introduced. These were carried on poles by two men, one behind and the other in front.

"In 1800, an *omnibus* was started; it had six horses and four wheels, but it did not succeed. In 1820, the people began to think that hackney-coaches were rather large lumbering things, and that perhaps one horse might manage to draw a vehicle. Then was invented a tall two-wheeled conveyance—with a great hood at the top, and a perch at the side for the driver; this was called a *cab*.

"In the year 1830, it was found that omnibuses had succeeded in Paris; and a coach proprietor, named Shillibeer, started new ones in London. This time they pleased the public. At first, the fare was 1s.; then the omnibuses succeeded pretty well. The fare was afterwards reduced to 6d.; then they succeeded better. It was next lowered to 4d. and 3d.; and then the omnibuses succeeded better still. Now, some of the omnibus fares are 1d. and 2d. per journey, and these also succeed very well; perhaps in time they will answer best of all."

"Have you any idea how much money is spent in omnibuses?" I said.

"No, indeed; I cannot tell. A year or two ago there were 1,000 omnibuses in and about London. The receipts of these were £2,890 per day, or £1,087,700 per annum. But in this year 1851, the amount must have been perhaps twice as much."

"Believe me, dear children,

"Yours sincerely,

"HENRY YOUNG."

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS.

Lesson 4. THE PRONOUNS.

P. I'm very much afraid, Willie, that I am going to speak some bad grammar, for I have lost one of my "parts of speech." Listen!

Papa will talk to Willie when papa knows what papa is going to talk about; but it would be foolish of papa to speak without thinking of what papa is going to say; so give papa time to arrange papa's ideas.

Ion. I think papa wants time to arrange his *words* as well as his ideas. I can supply the parts of speech that are wanting; there are too many "papas." —Here it is written properly.

Papa will talk to Willie when *he* knows what *he* is going to talk about: but it would be foolish of *him* to speak, without thinking of what *he* is going to say; so give *him* time to arrange *his* ideas.

It was not necessary to use the word papa more than once. The sound was unpleasant when it was repeated, so I used the words *him*—*he*—and *his* instead. Those are the parts of speech which papa lost.

P. Yes. I am glad you have found them for me. In return, I'll do something for you; I will find you a name for them. The little Latin word *pro*, means *for*; therefore these words which are used for nouns are called?

L. PRO-NOUNS?

P. That is their name—so

you may easily make the "definition."

L. I will do it.

Some words are used instead of nouns, to avoid repeating them too often. As they are used for nouns they are called PRONOUNS. Example: *He*—*him*—*his*.

I dare say there are some more.

P. Yes; find the pronouns which are wanted in the following sentences:

Willie! come to *papa*; *papa* wants to speak to *Willie*.

W. I will put it right.

Willie come to *me*; *I* want to speak to *you*.

P. Again,—

Here am *I*, and here are *Ion* and *Ada*. *Ion*, and *Ada*, and *I* are going to church. Will you come with *Ion*, and *Ada*, and *me*? Listen to *Ion*'s, *Ada*'s, and *my* footsteps!

Ion. You want the pronoun *we*.

Here are *we*... *We* are going to church. Will you come with *us*? Listen to *our* footsteps.

What a great deal of trouble the pronouns save!

L. What sort of words are the pronouns? Are they dependent or independent?

W. They are *dependent*, certainly. There is no sense in writing the word *he*, or *him*, or *I*, unless you first write the

name which the pronoun stands for. The person who reads such writing could not tell whom the pronouns stood for.

P. That is true; thus the NOUN is, you see, a very important part of speech, for he has two servants—two kinds of words depending on him.

Ion. Yes, one is for *show*—to show his quality; and the other is for *use*—to act instead of him. I'm very glad that I am a noun.

P. I should be very sorry, Ion; for I must tell you once more that a noun is only a

name—a mere word; and you are a boy.

One more remark on the pronouns, before you begin your parsing exercise. They are not always dependent. When people are speaking together they may use the pronouns—I, you, we, &c., independently.

W. Yes; because they themselves are present, and thus *show* whom the pronouns represent.

P. You may now make me a class of pronouns from the following sentences:—

No. 4. PARSING EXERCISE.

(Count the Pronouns in these sentences.)

This is Lucy. She is my daughter. Ion is my son; look at him! do you remember him? No, my friend, I must tell you that he is so much changed that I do not know his face. Indeed, although they are your children, I had forgotten them, and their names also. We old people often find our memories fail us. It is a pity that the memory so soon loses its power.

W. I have made a class of twenty pronouns!

P. You may have another lesson to-day.

Lesson 5. VERBS.

Here are some more words. Proceed to make new classes. Select all that are not nouns or adjectives; and see how many classes you can make.

Red—horse—crops—green—grass—chews—digests—food—kicks—master—gallops—home—neighs—snorts—behaves—is—bad—animal—will be punished—poor—master—is hurt—groans—suffers—great—pain.

* * * * *

L. We can only find one sort of words which are not nouns or adjectives. Here they are.

Crops,	Digests,
Chews,	Kicks,

Gallops,	Will be punished,
Neighs,	Is hurt,
Snorts,	Groans,
Behaves,	Suffers.
Is,	

These are alike, because they all express a *doing something*.

W. So do nouns express a doing something. If you say, "a kicking," that is the name of a real thing, of an action.

Ion. This is the difference, Lucy. These words declare that a person is doing something. And some declare that something is *done to a person*, such as, "is hurt," "will be punished."

P. And you may notice that you have put the little word "is" in the list. This does not

declare a doing something, or anything being done; yet it *declares*. It properly belongs to the class.

W. I can tell why. It declares a *being* something. You may say, he *is* good; he *will* be naughty; he *will be* punished.

P. Quite right; and all the words which declare a being something, or a doing something, or a something being done, are called **VERBS**.

Ion. Then I will say over the definition of our class:—

Definition - All words which signify being, doing, or being done to, are called **VERBS**.

Example 1—To bite is to do something; so *bite* is a verb.

2. *To run* is to do something; so *run* is a verb.

3. *I am good* declares a being something; so *am* is a verb.

4. *I was burned* declares something being done; so *was burned* is a verb.

P. In the parsing exercise which I am going to give you, instead of selecting all the verbs, read each sentence through and say what class each word in the sentence belongs to. I will parse the first sentence for you.

"I see great ships; they bring us foreign goods."

<i>I, a pronoun,</i>	<i>Bring, a verb,</i>
<i>See, a verb,</i>	<i>Us, a pronoun,</i>
<i>Great, an adjective,</i>	<i>Foreign, an adjective,</i>
<i>Ships, a noun,</i>	<i>Goods, a noun.</i>
<i>They, a pronoun,</i>	

You may, in this manner, take the words of each sentence, and the sentences in all your future Parsing Exercises.

No. 5. PARSING EXERCISE.

Naughty boys neglect their lessons. Dear Lucy loves her mamma. Mischiefous Willie gives his sister great trouble. Male sheep [are called*] rams; they have horns. Cheesemongers sell cheese. Omnibuses carry many people. Fine ladies carry parasols; they wear satin gowns. Charles! you [may bring] your best hat. Mary [is eating] her nice dinner. Good horses deserve kind masters. I am unwell. Kiss me. Good-night!

EARLY RISING.

DID you but know, when bathed in dew,
How sweet the little violet grew,
 Amidst the thorny brake;
How fragrant blew the ambient air,
O'er beds of primroses so fair,
 Your pillow you'd forsake.

Paler than the autumnal leaf,
Or the wan hue of pining grief,
 The cheek of sloth shall grow;
Nor can cosmetic, wash, or ball,
Nature's own favourite tints recall,
 If once you let them go. HERRICK.

* All words when inclosed in brackets form only one part of speech.

THE FOREIGN TRAVELLER.

TURKEY.

"MY DEAR CHILDREN,—

"The Russian Countess was soon ready, and we started for the tombs. As the lady was of some importance, the Russian Ambassador had politely sent his chief 'dragoman' to accompany her; and we all three embarked in a 'caique,' as the Turkish boats are called.

"A caique is a very elegant craft, but none the more comfortable for all that;—in the first place, it is very fragile and likely to upset; and secondly, there are no seats in it. I was obliged to sit as the Turks do, at the bottom of the boat, in what the English would call a squatting position—which is not at all pleasant to those who wear braces and straps. Notwithstanding, as we glided with astonishing swiftness over the sparkling surface of the Golden Horn, it was very agreeable. The boatmen had astonishing powers of endurance; they strained away at the oar, under a scorching sun, for hour after hour, without any appearance of fatigue.

"When we reached the burial-grounds, I was surprised to find that they were used as promenades; but I soon learned that this was not bad taste as I had supposed. In Turkey these places are always found in the most beautiful situations. There are groves of cypress to afford shelter from the sun; the tomb-stones are of fantastic

shape and curiously wrought; some are gaily gilt, and seem made to excite pleasure instead of sadness. I could tell you very much of the tombs we saw—of the sepulchres of sultans, sultanesses, ministers, pachas, priests and others, many of whom had been suddenly sent to the grave by order of their master—or by the hands of their enemies; but you would only be tired with such accounts.

"On our way home we landed at the VALLEY OF SWEET WATERS, one of the most verdant and charming spots ever seen. Here we found the SUMMER PALACE OF THE SULTAN, which, of course, we wished to inspect. We did not get in without paying a handsome fee to the attendants, and we were then disappointed. The walls were daubed with badly painted landscapes; everything was coarse and tawdry. The only reward I gained was in lying on the couch, or 'divan,' on which so many sultans and fair sultanesses had before reclined. We were more pleased with the gardens and meadows, but did not remain long in the establishment.

"When we reached Constantinople again, the sun's last rays were flaming on the crescent of the mosque of Sophia. The crescent is, as I may have told you before, the sign of the Mahometan religion; just as the cross is the sign of the

religion of our Saviour. The darkness of night was coming on quickly; but just before we landed, the scene was lit up by the cannon, which were again fired in honour of the sultan's little son.

"Although it is against the law to venture out after sunset without a lantern, I thought I would run the risk of imprisonment, and take an after-dinner walk. Scarcely, however, had I gone half-a-dozen yards, before I stumbled over something that was very unpleasant. What it was I cannot tell; but not knowing what might happen next, I thought it better to return home again.

"The next morning I accompanied the Countess in another ramble. We crossed from the part of the city called the *Pera*, where we were residing, to another part, called the *Stamboul*. Here we found another cemetery, containing the mausoleums of more sovereigns, murdered babes, and strangled rulers.

"The Mahometan places of worship are called 'mosques.' We could not be allowed to visit them because there was no 'firman' or order of the sultan out, which is necessary before permission can be given. But I did not like to leave without a glimpse of one; so I ventured to pop my head inside the door of that of the Sultan Achmet. I had an excellent view, but I was not suffered to remain long. The Turks despatched me, followed me with all kinds of unholy threats,

and I was obliged to decamp in hot haste.

"Like many other objects in the world, the mosques, I think, derive their interest from the mystery attached to them. If it were easy to obtain admission, travellers would not care to see them. They do not seem to be as beautiful as our cathedrals are, but I had no chance of judging fairly.

"Near the mosque of St. Sophia we saw the mausoleum of Sultan Monrat. On one side of the mausoleum we observed a large group of carved figures, and were told that they only represented the sultan's *one hundred and twenty* children, who had been strangled in one day by his successor. On the other side were carvings of his wives, who had been cut off in the same merciless style.

"Our next visit was to the SLAVE-MARKET, for which Constantinople is so famous. Slavery here is very different from that of the West Indies. White as well as black slaves are sold, and they fetch high prices on account of their beauty.

"We certainly did not see many who were beautiful. The only one was a Georgian girl, who seemed to be greatly shocked when the keeper removed her veil to show her large dark eyes and blooming cheeks. The price set upon her was £600. One saucy-looking negress grinned till her white teeth were almost visible from ear to ear, and asked us to purchase her. Then, delighted at her own wit, she burst into a roar of laughter.

"Indeed, in almost every cell we heard sounds of merriment; no sighs or groans of anguish met our ears. Even the slaves who were imported fresh from Nubia every day, exhibited no signs of misery. In fact, although the sale of human beings is so wicked and revolting that nothing can excuse it. I fancy that in the East it is not so deplorable as in the West. In America and the West Indies the miserable beings are looked upon as cattle, and frequently used with the greatest cruelty. The slaves in Turkey are kindly treated, well clothed, and highly fed, as their plump bodies testify; nor is their position more humble than that of many domestic servants in our own free land; they are frequently treated as members of the family, and not unfrequently are adopted by their masters. Individuals are often raised from slavery to fill most important offices in the state. There are few, even of the noblest personages in the realm, whose ancestors may not be traced to the slave-market. Even his most illustrious majesty, the glorious brother of the sun and moon, as he is styled, is himself the descendant of a slave.

"The other day, I was reading a little book on Turkey, written by an American, who has been there; and I think you would like to read his account of the sale of a Georgian slave.

"From the freshening enjoyments of the bath I started off for the Aurat Bazaar, where

they deal in beauty and blood. The only being who there appeared to excite any degree of interest among the purchasers was a young Georgian. She had been taken several years since from her native province, and brought to this city, where she was purchased by a Jew. This man, to increase her value, placed her in a situation where she acquired many pleasing accomplishments. The violent death of her proprietor had hastened her disposal; at least, it was the cause of the sale's being more public than is usually the case where such an individual is to be purchased. She appeared to be about fifteen years of age, yet she had attained her full stature. There was something in her manner which seemed to show her humiliation and sorrow; yet, it gave her features a cast of extreme sweetness.

"Several of the Turks present appeared very intent on her purchase; they watched her slightest motion with fondness. They presumed not to lay a hand even on the borders of her dress, or to lift the thin veil that almost concealed her beautiful face. Her female servants stood near by, in evident grief at the thought of their separation from their young mistress.

"My eyes were so attracted by the rich flow of her chestnut hair, as it floated down her shoulders, and her large blue eye, that I did not, at first, notice the excitement which a commencement of the sale had created among the bystanders. A number of offers were made, rising above each other in quiet succession, till the last, reaching five hundred and forty pounds, created for some time a breathless pause. Then one of the company, stepping to the salesman, said something in a tone altogether inaudible, and the auction closed. It was instantly ru-

moured that the individual who had made the successful offer, intended to make a present of this beautiful Georgian to the sultan. This appeared to reconcile, in some measure, the unsuccessful competitors to their disappointment."

"I think, dear children, we will say no more at present on this painful subject; for, however well this beautiful girl might have been treated, the

fact of her having been sold is a very dreadful one.

" You may learn to be truly thankful to your Heavenly Father that you are placed in this Christian land, where all may know the name of Jesus, and enjoy true liberty.

" I am, dear children,
" Yours affectionately,
" UNCLE RICHARD."

DUTIFUL JEM.

THERE was a poor widow who lived in a cot,
She scarcely a blanket to warm her had got;
Her windows were broken, her walls were all bare,
And the cold winter-wind often whistled in there.

Poor Susan was old, and too feeble to spin,
Her forehead was wrinkled, her hands they were thin;
And bread she'd have wanted, as many have done,
If she had not been blessed with a good little son.

But he lovéd her well, like a dutiful lad,
And thought her the very best friend that he had;
And now to neglect or forsake her, he knew
Was the most wicked thing he could possibly do.

For he was quite healthy, and active, and stout,
While his poor mother hardly could hobble about,
And he thought it his duty, and greatest delight,
To work for her living from morning to night.

So he started each morning as gay as a lark,
And worked all day long in the fields till 'twas dark:
Then came home again to his dear mother's cot,
And cheerfully gave her the wages he got. .

And oh, how she loved him! how great was her joy!
To think her dear Jem was a dutiful boy:
Her arm round his neck she would tenderly cast,
And kiss his red cheek, while the tears trickled fast.

Oh, then, was not little Jem happier far,
Than naughty, and idle, and wicked boys are?
For as long as he lived, 'twas his comfort and joy,
To think he'd not been an undutiful boy.

JANE TAYLOR.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

4th Week.

MONDAY.

Moral Biography.

INDUSTRY.

THE MAN WHO MADE A STEAM-ENGINE—(*Continued*).

P. You could not understand all that Watt did to his model of the steam-engine, unless I could show it to you and explain it. Other improvements were soon added. The most striking was that of the *separate condenser*; the next was what was called the *condenser pump*. It is said that from these two inventions the gain was enormous; for “one pound of coal was made to do as much work as five pounds in Newcomen’s engine.”

Further improvements were soon made. Notwithstanding the former alterations, Newcomen’s engine was not really a steam-engine. Indeed it was called the *atmospheric engine*, and that was its proper name, for the atmosphere (as it pressed upon the “piston”) was the real moving power. Watt soon made the steam to work better than the air, by forming a *closed cylinder*. This caused the *steam* to force up the “piston,” and made it a **STEAM-ENGINE**. He made another improvement in order to save the coals, by shutting up the cylinder in a wooden jacket, or drum, while he smeared the piston with wax, tallow, and oil, to make it air-tight.

All these improvements were made by Watt in two years, and during his leisure hours. I need not stop to tell you what the public said. He continued his improvements, and in the course of twenty years he had rendered his engine applicable to all manner of purposes. He invented the *parallel-motion*, the *double-acting engine*, and many new features which you cannot understand; until at last he was able to make a bushel of coals perform the *labour of twenty men working for ten hours*. Thus a man’s daily work was performed at the cost of a halfpenny.

Watt was not content yet. Wherever there was a chance of making an improvement, the improvement was made. Indeed it is said he thought of nearly everything that has yet been invented in the steam-engine. He increased its regularity; he added an exquisitely ingenious apparatus called the *governor*, and improved, and improved, and improved, until, as it is said, “that which he had found a clumsy, weak, and boisterous apparatus, only applicable for the draining of mines, he converted into a machine, compact,

calm, and regular; powerful as an earthquake, yet docile as a child; and useful for almost every process of manufacture or art."

It is hardly worth while to tell you of the good which Watt gained for himself by this invention. It was a very great good to say, "I invented the steam-engine!" It was in itself enough to make his heart glad. Could he not think of the good which would be gained to his country? of the help it would be to his fellow-men?—to the manufacturer of goods; to the wearers of the goods; to those who dig under the earth; to those who fly over its surface? Could he not count up the many wonderful ways in which his powerful engine would be useful? and was not the thought of these things more delightful than the thought of money?

Oh, how much is an idea worth! *Think, Willie, when you go to school, that you may get all the ideas you can.* How much did the ideas which James Watt had when he was a boy, tell upon the world! And he saw and was glad. He saw an immense impulse given to the business of mining; he constantly saw new mines opened. Old mines which did not answer before were re-opened and worked with success. He saw perhaps thousands of people getting work and earning their daily bread, and owing it all to his ideas. Thousands? Ah! the steam-engine has employed even tens of thousands.

But it is little to what it has done itself. It is said that—

"To express by any ordinary terms in our language the advantages of Watt's improvements of the steam-engine would be altogether impossible.

"The steam-power at present employed in Great Britain and Ireland is equal to about 8,000,000 of men's power, or 1,600,000 horse-power. It is calculated that a horse requires eight times the quantity of soil for producing food that a human being does; if, therefore, horse-power were made to supersede steam-power, additional food for 1,600,000 horses would require to be raised, which would be equal to the food of 12,800,000 men.

"It is in consequence of the improved mechanical arrangements, and employment of inanimate forces in Great Britain, that this comparatively small country is enabled to manufacture goods cheaper, and with greater profit, than can be done by the largest and most populous countries, in which mechanism is imperfect, and labour performed exclusively by living agents.

"Thus are we taught that '**KNOWLEDGE IS POWER.**'

But Watt was not left without riches. After taking a partner in business who failed, he was joined by Mr. Matthew Boulton, a rich iron-founder of Birmingham. The partners improved the engines of the various mines, only asking in return a third of the coal saved by each engine. In one engine this amounted to £2,500 per annum, so that every year coal to the value of £7,500 was saved from that engine alone.

Thus from the owners of the hundreds of engines in the

various mines a vast stream of wealth flowed in; and although the partners had at first spent £47,000 without seeing any money in return, and other men had tried to deprive them of their rights, both men became immensely rich.

Mr. Watt thus gained not only pleasure and riches, but honours. All men honoured him, for his talents forced them to do so. When he was a boy he learned to look into things; but how much had he done so when he was a man! With his astonishing memory, he seemed to know everything; and when, as an old man, he left his business to his sons, then the men of learning and science gathered around him to listen to the voice of his old age.

All men also loved him; they loved him as one of the best and kindest of human beings. They admired his unassuming manners; they liked his quiet grave humour, and his pleasant jokes and anecdotes. It is said that whatever was the topic of conversation, if he took it up, they were astonished by the treasures of knowledge which he drew from the mine they had thus opened.. He could teach them new ideas in chemistry; he was also learned in antiquity, metaphysics, medicine, and etymology. He had studied modern languages and literature, German logic, and German poetry. He allowed his mind, like a great cyclopedia, "to be opened at any

letter his friends might choose to turn up."

Who would not honour such a man? His remarkable powers were preserved even to the day of his death. He lived till his 84th year, when he saw death coming, and calmly waited for it. He thanked his Heavenly Father for having been allowed to spend so many days on this earth, and that he had been able to employ them usefully. God had intrusted him with more than "ten talents," and they had all done service for his fellow-creatures.

The world did not forget James Watt when he died; neither will they forget him. By public subscription a statue was erected to his memory in Westminster Abbey; and on it an inscription by the great Lord Brougham was written. A statue was erected over his burial-place in the parish church of Handsworth, near Birmingham; another in his birth-place, at Greenock; another in Glasgow, the place where he lived and worked.

Statues of James Watt will never be wanting. As long as giant steam-engines, full of power and motion, encompass the earth, bringing the ends of the earth together, so that men know and love each other more; each will tell you to honour James Watt. Each strong giant may remind you, "*I was made by a thinking man, who 'looked into things.'*"

Would not you like, Willie, to copy that man?

CHAPTER II.

THE PARTS OF A PLANT.

P. We have spoken of the plant as a whole; now let us describe its organs, or *parts*.

I may as well tell you here that the whole vegetable kingdom may be arranged into two divisions. 1st, The FLOWERING PLANTS (*Phanerogamia*); 2ndly, The FLOWERLESS-PLANTS (*Cryptogamia*). These latter have no flowers, neither are there the organs of reproduction, the "seeds;" the new plants are produced by minute particles called *spores*. In your lessons from the Great Exhibition,* when we talked of the vegetable food in frigid countries, you heard of these plants.

Ion. Yes; I remember them—they are the *Lichens*, *Mosses*, *Sea-weeds*, and *Ferns*.

P. True; these flowerless plants are the lowest kinds of vegetable, and are found in the frigid countries, while the flowering plants (and the most beautiful flowers) are found in the warm tropics. Our lessons on botany will only relate to the flowering plants.

Here is one. Look at it, and tell me the different parts you observe.

Ion. This is a *Buttercup*, papa! I notice that it has a root, a stem, leaves, and a flower, and I suppose it has some seed!

P. Yes. You have mentioned the five *principal* parts;

we will begin by examining the Root.

THE ROOT.

W. I observe that it is the *lowest part* of the plant.

Ion. Secondly, it grows in a *downward direction*. (The stem of the plant grows up in the air, towards the light; and the root grows downwards—in the earth—from the light.)

L. Thirdly, the root has *branches* like the stem. You see that each branch becomes smaller, until, at last, they are only mere fibres.

Ion. What a multitude of small fibres there are, Lucy! How do they end?

P. Bring the root to me. The ends of these fibres are perhaps the most important organs in the plant, for they are its *mouths*. I will put one or two into the microscope, that you may see them. Now look!

Ion. I can see, nicely. Just notice, Lucy! At the end of each fibre there are a number of very small *pores*, just like the pores of a sponge.

P. That is the case. I will give you the names of these parts. The small fibres are called *rootlets*, and these sponge-like organs are called *spongiodes*.

Now that you have noticed the parts of the organ, I will tell you its functions. The spongiodes are used to absorb the water from the earth. Thus,

* "Fireside Facts from the Great Exhibition."

when the plant is growing, hundreds or thousands of these spongioles are at work; they absorb the juices of the earth, and convey them to the minute rootlets. The fluid is then passed up through the larger rootlets, and again through the largest rootlets, into the large stem, from whence it ascends the stem of the plant, and forms sap. In this way, while there is moisture to be had, the roots feed the plant all day long. You see, therefore, how important it is, when transplanting a plant, to preserve the rootlets.

W. But suppose there is no moisture, papa?

P. When the earth is very dry, they spread further, until they find moisture. This will lead to some other points concerning roots. If you compare the roots of a tree with the branches, you will find that they spread out beyond them. This is partly because the earth under the branches of the tree, is drier than the earth beyond. Again, it is necessary that the roots of a large tree should be longer, and should spread out wider than the branches, to fix it firmly in the earth, so that it may not blow down by the wind. Some roots have many thousands of spongioles. Can you see any other difference between this root and the stalk?

L. Yes, the root has no buds, neither has it any leaves, nor joints. May I cut off a piece, papa? I want to look inside.

P. Yes.

L. (*Cutting the root.*) Here is another difference; the root has not any pith, so that it differs

from the stem in four respects; it has neither buds, leaves, joints, nor pith.

P. Such a root is called a FIBROUS ROOT. In some plants the stems and branches possess the power of forming rootlets; you all know that if you cut a slip from a currant-tree, and plant it, it will frequently form a root; the pipings of pinks and carnations have the same property.

W. Not only do stems make new roots, I have known roots to form new stems. Some time ago, I noticed that there were six young plants growing around one of the plum-trees, which are nailed against the garden-wall. The gardener said that they were shoots which had been sent up by the roots of the old tree; but he dug them up, because, he said, they weakened it.

J. Rose-trees and cherry-trees grow in the same way; we call the new shoots "suckers."

P. Many plants have this property, particularly the grasses and reeds. I remember showing you some couch-grass, and telling you how troublesome it was.

Ion. It had long white roots, with fibres hanging to them; they looked more like stems.

P. That is the proper name for them; they are "*under-ground stems.*" The stems, instead of growing above the earth, creep underneath for some distance; then they form new roots, get strength, and shoot upwards. By this plan of sending forth stems underneath the ground, the couch-

grass and others extend amazingly.

W. But they are very troublesome.

P. When they are not wanted they are, but in some places they are very useful. Do you not remember when the labourers were making the great railway bank near our house?

W. Yes; and when they had finished they planted it with turf and grass seed. They told me that in the course of a year the roots of the grass would spread very much, and bind together the particles of the earth. They were useful just in the same way as cow's hair when it is mixed with mortar.

P. In the same way grasses are useful on banks of rivers, and coasts where there is loose shifting sand. You may have seen long grasses and reeds growing by the river-side. In Holland, particularly, there are large tracts of sandy soil which are only prevented from blowing over the country by the reeds which have been planted in them.

W. What sort of a root do you call a carrot, papa?

P. The carrot is merely a part of a root; it is a store of fleshy nourishment saved up for the following year. There are many plants, such as the carrot, parsnip, and beetroot, which live for two seasons. The first year they only produce leaves without flowers, and lay up a store of nourishment in their fleshy roots; the next year this nourishment enables them to produce flowers and seeds.

W. But why don't the roots

do the whole thing at once? Why don't they give the plants all the nourishment they want to make flowers and seeds during the first year, instead of saving it up?

P. Ah, that is an interesting question; the answer is, *the plants are not strong enough to take it.* This is the case in TEMPERATE COUNTRIES, because there is not much heat; but it is different in the TROPICAL COUNTRIES. If you were to cultivate these vegetables in the tropics, the roots would not form a store of nourishment. It would not be necessary; the moisture and heat of the climate would strengthen the plant so that it would grow up, and produce its flowers and seeds in a year.

This is the case particularly with the potato. In its native climate, the warm part of South America, very little fleshy substance is wanted for the young plants of the next year; so that there the potatoes are so small it is not worth while to cultivate them; but if you were to bring one over to England, the plant would find it necessary to make much larger "fleshy stores" for the next year; thus it would produce for us potatoes which are worth eating.

There are plants in the dry tropics which have fleshy roots from another cause, but these we must leave now. You see how it is that the carrot, parsnip, potato, &c., are the vegetables of the temperate countries in particular.

Ion. Yes. Because it is too cold for them to come to per-

fection the first year. The truth is, that they lay up a good store of nourishment to make flowers and seed the next year; then we pull up the poor plants, and take the nourishment for ourselves.

W. It is just as bad as when the *Sago Palm* forms an immense quantity of pith to be used for ripening its fruit—then men cut down the poor tree, and take out the pith for themselves.

L. Or, just as bad as when the bees lay up a store of honey for the winter; we rob and kill the poor bees, and take the honey for ourselves. Or, just as bad as when a confiding old hen makes a great cackling to rejoice at the egg she has laid—you know what we do.

W. Yes; we rejoice with her (that is called *sympathy*); and as we know that the egg contains a store of nourishment for the young chick, we take it for ourselves.

P. No more, Willie! I am afraid you are going to confess all the offences that man commits against the animal and vegetable kingdoms to obtain food; if so, you will make a long catalogue.

I should tell you that the potato from its spherical shape, is called a *TUBER*. The carrot, parsnip, and others have the *general name FLESHY ROOTS*, while to those which consist of numerous scales, such as the *lily* and *onion*, we give the name of *BULBS*. Some bulbs such as the *crocus*, are nearly solid.

L. Now let me count up the different varieties of roots.

Plants may be arranged according to the *shape* of their roots. Some have only *fibrous roots*, such as the butter-cups and the daisy.

Others have also *creeping stems* which runs along under ground.

Others have *fleshy roots*, such as the carrot, turnip, mangel-wurzel, radish, parsnip, beet-root, &c.

Others form several *tubers*, such as the potato; others have *bulbs*, such as the lily, onion, &c.

P. Plants may also be arranged in classes according to the *time* their roots last. I told you that those which grow, flower, and die in one year, are called *annuals*; those which last two years are *biennials*; while there are others which die down to the ground during the winter, and send up new stems in the spring, for more than two years—these are called *perennials*.

W. Let me repeat that, papa!

Plants are divided, according to the *time* which their roots last, into *annuals*, *biennials*, *perennials*.

P. If you like, you may also arrange plants according to the *places* in which their roots grow. Shall I mention the places?

L. On, yes, do, papa, please.

P. The roots of some plants grow in fresh water, such as the well-known bulbous root, the *hyacinth*, the roots of *duck-weed*, and of the water lily also; these are called *fluvial* plants, from the Latin *flumen* a river; others grow in the sea, these are called *marine* plants, from the Latin *mare*, the sea; others fix their roots in the trunks of trees, such as the mistletoe and the ivy.

—these are called *parasitical* plants; while those which grow on the land are called *terrestrial*.

W. I will repeat the divisions—

Plants may be arranged according to the *place* in which their roots grow, into fluvial, marine, parasitical, and terrestrial plants.

They are just like the mammals—they live on the earth, in the water, and on the trees.

P. Instead of saying fluvial and marine plants, you may call all those which live in the water *aquatic* plants, from the Latin word *aqua*, water.

W. Before we leave off, papa, we will make up another memory lesson and say it.

Memory Lesson 2. THE PARTS OF A PLANT—THE ROOT.

1. *The Root of a plant is that part which grows downward from*

the light, into the earth, towards the moisture.

2. *It may be distinguished from a stem by having no pith, buds, leaves, or joints, and by having minute organs called "spongioles." There are parts resembling roots which creep under the earth, but these are "underground stems."*

3. *The functions of the root are to absorb nourishment for the plant, and to fix it firmly in the ground.*

4. *The roots of plants differ in their shape. Some have only a fibrous root; while in others we find also "underground stems," "fleshy roots," "tubers," and "bulbs."*

5. *Roots also differ in the time during which they last; and are either annual, biennial, or perennial.*

6. *Roots also grow in different places; they absorb nourishment either from the land, the water, or trees. Thus we have terrestrial, aquatic, and parasitical plants.*

INDUSTRY.

I improve the passing hours,
For time is on the wing;
Sip honey from the flowers,
And merrily merrily sing.

All sally ends in sadness,
And trouble it will bring;
But wisdom leads to gladness,
And merrily merrily sing.

Repine not, if from labour
Your health and comfort spring;
Work hard, and help your neighbour,
And merrily merrily sing.

Store not your minds with fable,
To truth your homage bring;
Do all the good you are able,
And merrily merrily sing. NICKSON.

THE TUDORS.

HENRY VII.

P. KING RICHARD III. died in the battle of Bosworth-field, in the year 1485; and Henry Tudor, Earl of Richmond, was crowned king in his stead. The crown was found in the battle-field, and was placed on the head of Henry. Then all the soldiers of the army shouted "*Long live King Henry VII.!*" to the satisfaction of most of the English nation.

Henry was connected with the House of Lancaster, as his grandmother, Catherine, was, you may remember, the widow of Henry V. There was a princess still living, named Elizabeth, who was the daughter of King Edward IV., and sister to the young princes who were murdered; she therefore belonged to the House of York. A few months after his coronation, Henry married Elizabeth, and then the nation were more pleased than before, for they said, "The Houses of York and Lancaster are now united, and thus the civil wars will end."

Ion. And if Henry and Elizabeth had any children, those children would be descended from *both* houses?

P. Yes. This first step was a wise one. The people thought, "Now we have a wise king!" and so they had, truly. He, King Henry, as he sat on his throne, was observing, and thoughtful.

He thought of himself first;

perhaps. "I am king, and I have to rule all these people, clergy, and nobles; I have power, because the greater part of the people, and the greater part of the nobles, wish me to rule. If I wish to raise an army, the nobles will not attend with their vassals, as in the times of the feudal system; but they must pay their war-tax, or 'scutage.' The people, too, will pay heavy taxes; and their Members of Parliament will grant me supplies."

When he looked at the CLERGY, he found that instead of being poor they were immensely rich; they possessed nearly one-fifth of all the land. But they were losing their power over the people, who had heard and read the truth. They now cared little for the Pope. The Plantagenet race had expired, and the Papal system and the Feudal system had begun to expire also.

He next noticed the BARONS. They still had great power; and he thought to himself, "As long as these men are thus strong, they will quarrel and keep the kingdom in a broil; thus I shall never be able to keep order: I will try and humble them."

Then he looked at the PEOPLE. The people, as I told you, were now important. They had power in governing the nation, because their representatives could speak for them. As I

said, the representatives met to grant the supplies; and if they required any privileges for the people, they would expect the king to grant their requests before they paid him his money.

The people had become more independent during the late wars and disorders. They seemed to have "privileges" enough; and now that there was peace, they seemed more inclined to work and get riches than to trouble themselves about parliaments. They knew that when the king called a parliament, he wished to get new supplies, for which they must pay new taxes. So it was the practice of many people to attend only to their own affairs, and to have as little to do with politics as possible. Some would pray to be excused from sending any representatives, saying, "Oh, we are too poor!" (for the representatives were *paid* for their services)—or they would say, "We live too far off"—or, "We cannot find any representative to send." Then the king would tell the sheriff of their county to force some one to attend.

As the nobles, who formed the *House of Lords*, had to pay "scutage," they also did not much like to meet. When the House of Lords was summoned, the members would send word that they were ill, or very poor, or were busy. One bishop, it is said, sent word that he was extremely fat, and therefore could not come! If they had spoken the truth, they would have said, "We do not want to pay any taxes."

When the thoughtful king had noticed all these things, he determined to get money in various ways, and save it; then he would be rich, and independent of the nobles and people. He saw that while the Feudal system lasted, the nobles could hinder the government of the king; then he said to himself, "I will break down their power, and increase the power of the people. With the riches which I shall save, I will myself be independent of the people. Then I need not call any parliaments; I will make my own laws, and I will increase the power of the king to a higher pitch than it has ever been carried before."

W. And did he do so?

P. Yes, he succeeded; for I told you that he was a *thinking* man. But let me first tell you how he was hindered.

For a long time his reign was marked by plots and conspiracies. The people had been too much accustomed to disturbances for all to be quiet at once. It was to be expected, that if there were any relations either of Richard III. or Edward IV. living, they would fight for the crown. But the only person to be feared was Richard III.'s nephew, the young Earl of Warwick. He, however, was not fifteen years old, and was almost an idiot; so Henry confined him in the Tower.

But this step did not secure peace. A young man named *Lambert Simnel* came forward, and boldly declared that he was the young Earl of Warwick,

and that he had just escaped from the Tower. It appears that as he was a very good-looking young man, some nobles who wished to dethrone Henry had persuaded him to say this. They raised an army, and attacked the king; but Henry routed them with great slaughter, and took Lambert Simnel prisoner.

The king knew that the youth had been persuaded to do what he did by other people, so he did not kill him, or send him to prison; he made him a turnspit in his kitchen, and afterwards, as he behaved himself very well, he was trusted to take care of the king's falcons and hawks.

The next great disturbance broke out when Henry had been king seven or eight years. It was far more serious than the former. Suddenly a young man appeared, saying that he was one of the sons of Edward IV., who, you know, had been murdered by their cruel uncle, Richard III. But this young man said, "No! this was not true; the men who had been paid to murder them did not like to kill both, and had allowed him to escape from the Tower."

A sister of Edward IV., called the Duchess of Burgundy, was still living. So the young man, whose name was

Perkin Warbeck, went to see the duchess, and called her his aunt. The duchess was one of the king's enemies; and when she saw the young man, she was delighted. She said there was no doubt that he was her nephew, for he had the family likeness. Many nobles also believed, and a great conspiracy was formed to support him. James IV., King of Scotland, also was quite persuaded that he was Edward IV.'s son; and he gave him a young lady, named Lady Catherine Gordon, to be his wife.

Warbeck, however, did not succeed. After raising troops and failing two or three times, he put himself at the head of some rebels in Cornwall, and besieged Exeter. Here he failed, and he was obliged to surrender as prisoner.

His life might perhaps have been spared; but while in prison he formed a conspiracy with the young Earl of Warwick, who, you know, was imprisoned in the Tower. They both agreed to run away, and try again for the kingdom; but their schemes were discovered. Warbeck was hanged at Tyburn, and the young earl was beheaded on Tower Hill.

Thus did the king rid himself of both enemies at once. He then proceeded to carry out the plans which I mentioned at first.

AN EPITAPH AT CHICHESTER.

HERE lies an old soldier, whom all must applaud,
Who fought many battles at home and abroad;
But the hottest engagement he ever was in,
Was the conquest of self in the battle of sin.

THE ENGLISH TRAVELLER.

LONDON—MORAL CONDITION.

"**M**Y DEAR CHILDREN,—

"Now for some more "general particulars," said my friend. 'I have not quite done with the question of CONVEYANCES. Not only the *personal*, but the *parcel* and *letter* conveyance in London is important. The small parcels are conveyed by carriers' carts, and by the London Parcels Delivery Company; the large parcels are conveyed by wagon and railway. But the parcel conveyance has become less important, as the means of personal conveyance has increased.'"

W. Yes. I suppose that people carry their own parcels!

"But the most surprising part is the conveyance of the *letters*. This is managed by an establishment called the *Post Office*, which is a truly wonderful place. The business is managed in this way. The great metropolis is divided into "circuits"; all the places within three miles of the Post Office are said to be in "the three-mile circuit," and the letters are collected and delivered no less than ten times per day. In those places outside the three-mile circle the deliveries are less frequent. Since the introduction of the *per*-*ye*-*postage*, the number of letters has increased enormously. The London letters alone, for 14th February, 1850, numbered 187,037; the number of newspapers posted in the year is more than 70,000,000. The postage

collected in London in 1848 amounted to £876,351.

"Now," said my friend, "shall I tell you of the "moral condition" of London?"

"Yes, please."

"The **MORAL CONDITION** of a city is closely connected with its sanitary condition. One relates, as you know, to the health of the body, the other to the health of the mind. When a man's mind is healthy, so that he tries to act in an honest and proper manner, we may say that he is in good moral condition. But as the health of the mind depends very much on the health of the body, so the *moral condition* of a people depends very much on their *sanitary condition*. Do you understand that?"

"Yes," I said; "when the inhabitants of a city try always to do right, it is said to be in a good moral condition; and, when the greater part are bad men, the city is said to be in an *immoral* condition. So I thought of the dishonest people — the pickpockets and thieves; of the lazy people—the beggars; and of the drunken people. Then I thought of the policemen, who keep them in order; of the magistrates, who correct them; and of the jails in which they are confined.

"I next thought of the *moral* people; of the industrious poor, who work hard to earn an ho-

nest penny ; of the savings-banks, where their earnings are stored ; of the schools, where sick and poor children are taught ; of the churches and chapels, where all may "hear of Heaven, and learn the way"; of the hospitals and almshouses, which those who loved God built for their fellow-creatures ; and of all the societies which spread the knowledge of God amongst the heathen.

"But," my friend continued, "the *thieves* and *pickpockets* of London are not so numerous as they used to be. The beggars are more numerous, and are almost as bad: it is said that of the London beggars, nine out of ten are gross impostors, and convicted vagrants, and of these the very worst are the blind and cripples. They follow their profession almost as regularly as tradesmen. There is a society, called the Mendicity Society, formed to suppress these vagabonds, but neither their agents nor the police can prevent street-begging. In 1837 the police took into custody 4,300 beggars.

"Now, tell me about the *POLICEMEN*," I asked.

"The London Police were established by Sir Robert Peel in 1829. The whole number of men in 1850 was 4,805; besides 584 sergeants, 123 inspectors, and 18 superintendents. They are arranged in 18 divisions, according to the letters of the alphabet; the letter shows the divisions to which a policeman belongs, and is marked on his blue coat. Part of the "force" are on duty during the

day, and a greater part during the night. Their duties are very heavy; every two months out of three a policeman does night-duty for 9 hours (from 9 at night until 6 in the morning); he walks nearly 20 miles per day, as he goes his rounds; and attends charges before the magistrates. The number of *Police Offices* is nineteen. Here magistrates sit to examine offenders and commit them for trial. When a prisoner has committed what is called a felony, he is tried at one of the *Criminal Courts*. The principal of these is called the Old Bailey.

"There are several *prisons* belonging to the criminal courts, in which prisoners are kept. That belonging to the Old Bailey is called Newgate. Besides Newgate, there are ten other large jails. There are also prisons, not for felons, but for those who are in debt and cannot pay. The two principal of these are the Queen's Bench prison, and Whitecross Street. Men are not now imprisoned for debt so much as they used to be.

"But we have had enough of the dark side. Suppose we look at the better side of the picture. Certainly there are vast numbers of people who are honest and industrious also. The *SAVINGS-BANKS* of London are places in which working men may put their money in safety, and receive a good rate of interest for it.

"During the year 1848, £4,205,451 was deposited in these banks. But it is said that not all of this was placed there

by the working classes ; people of the middle ranks place their money in these banks for the sake of the large "interest" allowed.

" It appears, too, that it is the habit of the Londoners to work for the sake of others as well as themselves ; for London is filled with all kinds of charitable institutions. There are many Hospitals. At St. Bartholomew's Hospital, 71,573 patients were relieved. Guy's Hospital was founded by Thomas Guy, a bookseller, who himself expended £18,793 on the building, and left £219,419 for its support. In 1829, a citizen named Thomas Hunt, left £200,000 to the hospital at his death. These are wonderful amounts of money ; they have been truly called ' princely sums.' St. Thomas's Hospital, in the Borough, has an income of £25,000 per year. Besides these there are St. George's, Middlesex, the London, Westminster, Marylebone, and Paddington, University College, King's College, Charing Cross Hospital, and other smaller establishments of the kind ; the income of all those establishments must be immense ; some depend on voluntary contributions alone.

" The *Bedlam Hospital*, and *St. Luke's*, are large establishments for the insane.

" The *Foundling Hospital* was established for poor deserted children.

" The *Magdalen Hospital* was established for females ; and,

" The *Philanthropic Institu-*

tion was founded for receiving and reforming young criminals when discharged from prison.

" Besides all these hospitals, there are vast numbers of institutions, small and large, called either almshouses or asylums, —such as the Blind Asylum, Asylum for the Deaf and Dumb, &c. There are hundreds of public schools for giving instruction to the poor ; and teachers for these schools are trained at the "training schools" of the National Society, the British and Foreign Society, the Home and Colonial Society, and other societies. There are large public schools, such as those of Christ's Hospital, St. Paul's, Westminster, the Charterhouse, Merchant Tailors, and the City of London. There are more than 600 places of worship—about 300 churches ; and above 300 chapels.

" But these things alone, only show *part* of the moral condition of London. We cannot reckon the moral condition of a city only by the money spent. The private treatment of one person by another, and the general character of the people ; and, above all, the honour they pay to God who gives them all things, are the best proofs of their moral condition."

" Such, dear children, are a few of the facts which my friend told me on this subject. I hope they will interest you.

" Believe me

" Your affectionate friend,
" HENRY YOUNG."

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS.

Lesson 6. THE ADVERBS.

P. We are going to talk about "Adverbs." You know that the Latin word *Ad* means to, or added to. I suppose, therefore, that you can easily imagine what is meant by an Adverb.

Ion. I suppose it means a word added to a verb. Let me see if I can add any words to a verb. I am running *quickly*; I am running *now*; I am running *slowly*; I am running *much*; I will run *there*; I will run *everywhere*; I will run a *little*; I will run *presently*; I will run *soon*. It is very easy to add words to a verb.

W. Those words, Ion, are very much like the adjectives, which we add to nouns. Just as adjectives tell you the quality of the nouns, so adverbs tell you something about verbs. Some tell you *how* the action

is done; others tell you *where*, or *when* it is done.

P. But I should tell you that some adverbs are added to ADJECTIVES. You may add one to the adjective "better;" thus: *much better*; *a little sweeter*, if you please; *very nice tea*; *rather good toast*.

L. Now, I think I can describe an adverb.

A word which is added to a verb to tell us something about it, is called an adverb; adverbs are sometimes added to adjectives. Example — Nicely, well, slowly, rather, very, &c.

W. We must not forget that an adverb is another *dependent* word; it is the servant of the verb, just as the adjective is the servant of the noun.

Ion. More—it is the servant of the adjective also; it is the servant of a servant.

P. You may now go through your parsing exercise.

No. 6. PARSING EXERCISE.

My eldest brother [can sing] many songs nicely. Your foolish sister will cut her finger presently. Look! she [has hurt] herself very much. Come, little John, dance! you can dance famously. No I will not.* Sit down, you silly boy. Columbus discovered America; it then contained many inhabitants. He nearly lost his balance. Parrots talk loudly. Birds warble sweetly. They hop about prettily. Potatoes will be boiled soon. I [am coming] immediately. He [was shot] there, directly.

* "Not" shows how much John will dance.

Lesson 7. THE ARTICLES.

P. Did you never notice how strangely the nouns sound if used alone? Listen—

I saw boy coming down street riding horse. He fell on stones; it was accident.

L. You want the words *a* and *the*. Before "accident" you would use *an*; you would say, "an accident."

P. These little words are called *articles*; they are placed before nouns to show whether they are used in a general or particular way. You know that anything which is general relates to many things; and that anything particular relates to only one thing.

Then, if I say, "Bring me a stone," it may mean *any* stone in our garden; or any stone in our street; or any stone in this world. "Bring me a stone" is a very general remark.

But, suppose that I say bring me *the* stone. How many stones have you to choose from then?

W. We can only choose one stone—the stone which you are talking about—that is a *particular* remark, because you point out the stone you want.

P. And you may thus remember that the article *the*, because it points out a particular object, is called the *Definite Article*. The article *a*, does not point out any particular object, therefore it is called the *Indefinite Article*.

L. Is not *an* another article?

P. No. *An* is merely the indefinite article *a*, with *n* added to it for a certain purpose. You know that people often speak very quickly, and run their words together; thus, if we said "a owl," men would soon join the two vowels together and say "owl," which would sound like *yowl*.

W. And that is not proper. If I were *an* owl, I should be offended if anybody called me that.

P. So, also, you cannot say "a egg," very nicely—you would soon pronounce "a-agg." Thus you see that when a word begins with a vowel, you use the indefinite article with an *n* added to it to separate the vowels.

L. So there are two articles—The definite article, *the*; and—The indefinite article *a*, or *an*.

No. 7. PARSING EXERCISE.

The boy gave an apple to a girl. A horse and an ass are useful beasts. The man bought a pig, an antelope, and the great black bull.

CAN I another bear to see
Preferred and honour'd above me,
And feel no inward pain?
Then in my heart will Jesus dwell,
For such kind feelings please him well,
And shall his love obtain.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

5th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO MADE CANALS.

P. WATT was a useful man, because he improved the steam-engine. Just as he improved the means of conveyance by land, so there was another man useful in forming conveyances by water.

I need hardly tell you how useful good conveyances are. I mentioned to you once before that in selling goods their value often depends much on the place where they are sold. Supposing the corn in Russia to be too abundant, and that the people cannot use it; then, much of it is valueless. But if that corn be brought to England, the English will pay a good price for it. For this change in its value, the Russians may thank the conveyance which brought it here.

W. But then you have to take off the expense of conveying the corn—so much for every bushel, I suppose; thus, you lessen the profit.

P. Yes; the more you pay for conveying the corn, the less profit you get on it: so, it is very important to get conveyance as cheaply and as quickly as possible.

Ion. I can tell when quick conveyances are useful; when you carry articles that will

perish. You told us that a boat-load of mackerel when brought to Billingsgate is sometimes worth £200, but that if the boat should happen not to reach Billingsgate until the next morning, its load would be worth about 20s.

W. And, if you send milk to London in the summer-time, and it does not arrive quickly, the conveyance may decrease its value, instead of increasing it.

P. Not only quickness, but cheapness in conveyance must also be attended to. There are large forests of timber in Russia. Suppose the trees to be cut down and lopped, and conveyed easily to London, they would be worth many thousands of pounds. But these trees now remain where they are; for, there are no roads, or means of conveyance near them. If they were felled, they must be brought down the mountain-side, and over many rugged places, where horses and carts could not come, for there are no roads. So, the trees remain where they are, of little or no value to man.

L. Because, to remove them you would have to give as much labour as the trees would be worth.

P. Certainly. Thus, he who can improve conveyances, by making them quicker or cheaper, does good. The cheapest moving powers are those which require no expense to support them, or keep them up. Thus, a ship is a cheaper conveyance than a coach; why?

L. Because the ship is moved by the wind, which does not cost anything to feed it, as horses do: it drives the sails before it without charging for its services.

W. And it does not die, as the horses do, giving people the expense to buy new ones.

P. At the same time, the wind is like many others who give their services for nothing; it cannot always be depended upon. It receives no wages, so it is perfectly free; it comes and goes whenever its fancy may please; and, after helping the ships which are going southward, it suddenly changes and takes an interest in those travelling eastward or westward.

So when Watt improved the steam-engine, men changed their servant the wind for water; the water formed steam, and conveyed them over the water.

W. But they allow the wind also to help them when it will; for the great steam-packets have sails, so that when they are travelling in the right direction, the steam and wind may work together.

P. True; and when steam was made to work on the land—to move railway carriages—then, not only quickness but cheapness was gained; for al-

though the steam-engine had to be fed with coal instead of corn, its food is cheaper, and it does more work for its food than the horse does.

L. But you were going, papa, to tell us of a man who fornied means of conveyance by water.

P. Ah! so I was. You must know, then, that goods can be conveyed by water from one part of a country to another.

W. Yes; on the rivers.

P. The rivers, however, like the wind, were not always exactly such as they were wished to be. It was often wished that they would run in a straight line, instead of forming a line like a serpent—a wave line.

Ion. That is because rivers cannot flow up hill: in their course they must run in the lowest ground. So, if a river in its course comes to a hill, it must flow round it, instead of keeping straight on.

P. And in some parts the distance round such a hill is thirty or fifty miles; while, if the river could only flow over or through the hill, its course might measure only five miles. Thus, as rivers were not found quite convenient, men found a remedy; they cut deep places for the water to flow in—they bored tunnels through the hills, made “cuttings” in places which were too high, and embankments in the parts which were too low, so that the water could easily flow in the way that they wished—in a straight line.

L. They must have taken a great deal of trouble.

P. Certainly they did: but they knew that if you wish to

have everything exactly as you want it, you must not expect to *find* it ready-made, but must take the pains to *make* it. These artificial rivers which the men made are called CANALS.

L. Oh, yes! We know what *canals* are! And are you going to tell us of one of the men who made the canals?

P. Yes. Once there was a time when the people of England had no canals: they let the old rivers run on in their old roundabout way, and of course the barges and boats had to go in that way too. Good patient people!

But they had long heard of canals. They had heard of the mighty canal of China—the *Imperial Canal*, which is two hundred feet broad, and extends southward from Pekin nine hundred miles. What a canal that is for Chinamen to cut!

Then, they had heard rumours of the canals of ancient days—how the old Egyptians were said to have cut a canal between the Red Sea and the Mediterranean; how the Greeks and Romans used to cut canals; and that the Romans made one for England, from Peterborough to Lincoln. The gentlemen of England who live at home at ease knew all about their hard-working neighbours the *Dutch*—what multitudes of canals they had cut in their large watering-place called Holland: they had seen the canals of France, too, especially the great canal of *Languedoc*, which joins the Mediterranean to the Atlantic; this is sixty feet broad, and is

a hundred and fifty miles long; it was finished in 1681; altogether, twelve thousand men had worked at it during a course of fifteen years; and it had cost twelve hundred thousand pounds.

With such an example it was time for the English people to be doing something of the same kind; but they still lived at ease—they let old Time pass on, and the rivers flow on, and they themselves stood still. Fifty years passed away—the year 1731 came; but still there were no English canals. It was about 1752, a hundred years ago, when the first modern canal was begun; it was, after some time, made twelve miles long, and was called the *Sankey Canal*; and although it cost much money, it turned out a profitable speculation.

A profitable speculation! That set the people a-thinking. Other parties said they would try to make canals. A nobleman, named the Duke of Bridgewater, determined to make one. He had some very rich coal-mines in a place called Worsley, about seven miles from Manchester; but these coals were not of great value, because there were no means for conveying them to some place where they might be used. The duke's father had, more than 120 years ago, in the year 1732, obtained an act of Parliament for making a canal; but he had not done so, because the expense of the work would be so enormous, and because there did not seem to be any man who could perform so difficult

a work. When, however, the Sankey Canal had been made, the case was different. It was believed that Englishmen could make canals, and there was one Englishman who seemed to believe that he could make any canal in any place. This man came forward and told the duke that he would make the canal from the coal-mines at Worsley to Manchester; it was

true that there were immense difficulties, but they could be surmounted. "And he felt sure," he said, "that he would surmount them, if the duke would let him try." And the duke did so.

The name of this man was JAMES BRINDLEY; but who he was, and what he did, I have not time to tell you now. You shall hear about him next week.

INDUSTRY.

PAUS' not to dream of the future before us,
Pause not to weep the wild cares that come o'er us ;
Hark how Creation's deep musical chorus,
 Unintermitting, goes up into Heaven !
Never the ocean wave falters in flowing ;
Never the little seed stops in its growing ;
More and more richly the rose-heart keeps glowing,
 Till from its nourishing stem it is riven.

"Labour is worship!"—the robin is singing;
"Labour is worship!"—the wild bee is ringing;
Listen! that eloquent whisper, upspringing,
 Speaks to thy soul from out nature's heart.
From the dark cloud flows the life-giving shower;
From the rough sod comes the soft-breathing flower;
From the small insect the rich coral bower;
 Only man, in the plan, ever shrinks from his part.

Labour is life! 'Tis the still water faileth;
Idleness ever despaireth, bewaileth :
Keep the watch wound, for the dark rust assaileth;
 Flowers droop and die in the stillness of noon.
Labour is glory!—the flying cloud lightens;
Only the waving wing changes and brightens;
Idle hearts only the dark future frightens:
 Play the sweet keys, wouldest thou keep them in tune.

Labour is rest from the sorrows that greet us;
Rest from all petty vexations that meet us;
Rest from sin-promptings that ever entreat us;
 Rest from world-syrens that lure us to ill.
Work!—and pure slumbers shall wait on thy pillow :
Work!—thou shalt ride over care's coming billow;
Lie not down wearied 'neath wo's weeping willow:
 Work with a stout heart and resolute will!

MRS. FRANCIS OSGOOD.

CHAPTER II.

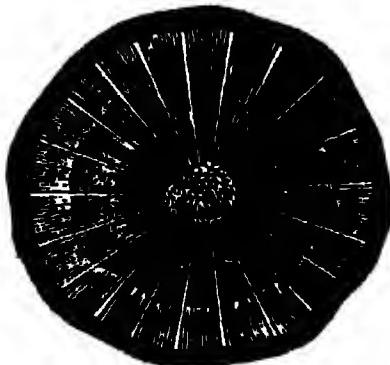
THE PARTS OF A PLANT—THE STEM.

L. You have talked to us, papa, of the distinctions between a plant and an animal; and you began to describe the parts of a plant.

P. Yes; we noticed the *root*: to-day we will examine the *stem*. The root you described as the part which grows downwards—from the light—into the earth.

Ion. So the stem grows upwards—towards the light—in the air. We do not always call this part “*stem*”; sometimes we say *stalk*, and sometimes *trunk*.

P. True; now for the *parts* of this part—or its *organs*, we may say. Here is a piece of wood from a Beech-tree. I



have cut the branch across. Now examine it, and see how many parts you notice.

Ion. I observe the inside part, the *pith*.

W. Secondly, the outside part, the *bark*.

L. Thirdly, the *wood* between the bark and the pith. There are two kinds—the inside wood,

near the pith, is dark; and that nearer the bark is light.

P. The darker part is called the *heart-wood*, and the lighter part the *sap-wood*. What else do you see?

Ion. I see some lines drawn from the centre to the circumference of the circle; *radii*, I should call them.

P. Or, as you are not learning drawing, you may use a plain English word, *rays*. These rays begin from the pith; and as the Latin for pith is *medulla*, we call them the *medullary rays*. Are there any other parts?

W. Yes; please let me have a piece of the wood to bite. Look, papa, now I have bitten it! I can pull the wood and the bark into shreds—you call them *fibre*s; they are “*parts*” of the stem.

P. Certainly; and as they do not fit closely together in the wood, but are interwoven, there are spaces between them which we call *cells*.

Ion. And what is all this wet which has come out from the stick since Willie has bitten it? Is it *sap*?

P. Yes; that was contained in the cells. There is another part which you cannot well observe; it is a thin membrane, which serves as a bark or *sheath* to the pith. It is called the *medullary sheath*.

L. Now I will count up the parts we have noticed:—The pith—bark—heart-wood—sap-

wood—medullary sheath—medullary rays—fibres—cells—and sap.

P. You have noticed the names of these parts; we will next talk of their growth, and their uses.

When the young plant has been growing one year, it merely consists of the pith, a thin circle of wood, and a thin circle of bark. By the end of the next year, however, there are two circles of wood, and two of bark. The second circle of wood is formed outside the previous one; and the second circle of bark is formed inside the old one—thus the two new circles touch each other. Can you understand that?

Ion. Yes; they must touch each other.

P. The next year there will be three layers of wood and three of bark; a new layer of wood being added outside that of the last year, and a new layer of bark within that of the last year. The next year there are four layers of each substance; the next year five; and so on, new circular layers being formed every year.

L. So I suppose that by counting the circles we might tell how old a tree is?

P. Yes; by counting the circles of wood, but not those of the bark, for they are not all perfect. You know that the thin outside circle of the bark has to stretch every year as the tree grows; therefore it must at last crack. Thus it is that the stem has so rough an appearance outside.

W. Yes, how very rough the

bark of our apple tree is; but of course the bark which covered it when it was as thin as mamma's netting-needle, is not large enough now that its stem is so thick.

P. This piece of stem from the Beech, because it grows in the manner I have described, is called an EXOGEN, which means *growing outside*. There are other kinds of stems, which we shall talk of soon; but they are not so common in temperate countries as the Exogens. All the trees and shrubs of this country, such as the Ash, Oak, Beech, Fir, Apple, Pear, &c., are exogens. You may know them by their numerous branches, which are not found in the other kind of stems.

Now that you have noticed the parts of the stem, let us speak of their *functions* (or uses).

What is the use of the pith? When the plant is very young, if you break its stalk you will hardly observe the pith. This is because it is filled with a greenish fluid, called *sap*. The sap is conveyed through the pith, up to the leaves and buds. But this is not always the case. When the plant is older, the sap ascends in another way. The pith, then, is not wanted; it becomes dry and dead; and it may be removed without destroying the plant.

Ion. Will you tell us the uses of the wood next, papa?

P. We shall see at once the functions of the woody fibre and cells, of the bark and of the medullary rays, if I give you the history of the sap and its

progress. What are the functions of the *sap*?

You remember the thousands of little spongelets at the end of the rootlets. Imagine them working all day, very busy collecting the moisture to make sap. As they collect it, it ascends through the rootlets into the larger branches of the roots, and from them into the stem.

L. But what makes it ascend; how can it rise upwards? I thought that water would never flow up?

P. How it is done I cannot tell; it is one of the "mysteries" of nature. But, oh! how wonderful it is! Think, next time you walk in the fields, of the sap rising in the dark earth underneath your feet! think of the millions of spongelets and rootlets there, all hard at work! they are working unseen, that the grass may grow, and beautify the earth. Yet how silently it is all done! there is no show, no fuss, no noise, no buzz. It is all done regularly, and it is done earnestly, for if there is but little moisture they extend further in the soil and deeper, until they find some. Talk about the bees! Bees are buzzing busybodies; but in all the earth there are no workers so silent, so humble, so out of sight, so unknown, unheard of, uncared for, as the dear little rootlets under the earth. What would the bees do, I wonder, if the rootlets did not work well?

W. Or, men either?

L. But, papa, how you are running on about the rootlets!

You were telling us about the stem.

P. Or rather, I was speaking about the *sap*,—that it ascended the root into the stem. When the tree is a year or two old, the sap does not rise through the pith, but through the cells between the fibres of the wood. It ascends from the bottom of the trunk to the top, through the wood of the large branches, into the smaller ones, into the little twigs, the little leaf-stalks, and thence into the leaves.

W. And then it cannot go any further!

P. Yes, it can; then some of it ascends into the air. The watery part of the sap rises in the form of vapour, and the sap which remains is, of course, thicker than before; its nature is also altered, for it absorbs gases from the air, and becomes highly nutritious food for the plant. It then descends the tree; but it does not return the same way as it went. Instead of descending through the wood, it comes down through certain vessels in the bark.

You may easily prove that it descends through the bark by an experiment with any of the little trees in your garden. Tie a string tightly round the stem, so that the sap cannot pass; the bark will then swell very much, from the sap that accumulates.

L. And when the sap comes down the bark, where does it go to?

P. A portion of it passes from the bark into the *medullary rays*—and through them until it reaches the old circles of

wood which are nearest the pith. Here it remains, filling up all the pores, and becoming quite hard. The circles of wood thus filled up become quite solid and of a dark colour, and are called *heart-wood*, as I told you when it was pointed out to you in the drawing.

W. So you did, papa! Let us look at the drawing again (page 69). Now you see, Lucy, that the heart-wood is shaded, darker. But I should think such wood is a hindrance, because as the pores are filled up the sap cannot ascend through them. What is the function of the heart-wood, papa?

P. It is formed to give solidity and strength to the tree. If the stem were all sap-wood, it would bend about, and be blown down. Shall I give you an instance?

Ion. Yes, do, papa, please.

P. I know a tree, at the bottom of our garden, which grows very fast. It makes broad green leaves, long green branches, and large bunches of green fruit every year; therefore it requires plenty of sap. Thus its stems are nearly all sap-wood; so that if it had the presumption to try and stand upright, it would immediately be blown down. Moreover, the spaces between the woody fibres are very large, so that the sap may ascend rapidly: thus the stem is peculiarly weak.

W. So it is!

P. We therefore nail a part of it against the garden wall, and part along the roof of the greenhouse.

W. So we do!

P. And we call it—?

L. Our *Vine*. I think, papa, that we can now tell the functions of the stem's different parts.

(1.) *The function of the PITH is to convey the sap upward when the plant is very young—afterwards it has no particular function.*

P. True; and it is not therefore a *vital* part. There is an old hollow Oak-tree at your uncle's—the pith is completely cut away; yet the tree lives.

L. (2.) *The SAP rises in the tree in a thin watery state, and descends in a thick glutinous state; its function is to form heart-wood.*

P. It has many more than that; but I have only told you of the functions which relate to the *history of the stem*—it supplies nourishment for all parts, for the buds, leaves, flowers, and fruits.

L. (3.) *The function of the SAP-WOOD is to convey the sap, through its pores or cells, up to the leaves.*

(4.) *The function of the bark is to convey down from the leaves; it is also useful as a covering to the tree.*

P. Thus, both these are *vital* parts. If your uncle were to cut through the bark of his hollow oak, it could die, because the moisture would not descend; and if he cut through the sap-wood it must die, because the moisture could not ascend—there would be no communication between the root and the leaves.

L. (5.) *The function of the MEDULLARY RAYS is to convey*

the thickened sap from the bark, to form heart-wood.

(6.) The function of the HEART-WOOD is to give solidity and strength to the stem, that it may not be blown down by the wind. Now, what is the function of the stem, altogether, I wonder?

P. I will say that myself.

(7.) The chief functions of the STEM are to elevate the leaves, flowers, and fruit, into the best position for receiving light and air; and to convey the sap in both directions.

So much for THE STEM OF AN EXOGEN.

THE LAST LOOK AT THE STARS.

Oh, raise me in the bed, mother, and let me look once more Upon the bonny twinkling stars that gem the blue sky o'er. As brightly as they smiled upon my childhood's opening flower, They will keep smiling, smiling still, upon my dying hour.

Oh, glorious and bright, mother, these fair stars still will shine; But they'll smile another night, mother, for other eyes than mine. You'll look upon them, mother, as you watch beside my bed, And they'll keep smiling, smiling on, o'er the mourner and her dead.

I've loved their gentle light, mother, since I first knew their ray: You remember how I wondered once why they never shone by day; How I used to watch them from the spot where my dead brother lies, And think those tiny sparkling things must be the angels' eyes.

They'll shine as bright as now, mother, when I am dead and gone; When the turf is on my brow, mother, and the moss upon my stone. Do you think that it is true, mother, as some old stories tell, That the spirits of the pardoned ones in those pure orbs may dwell?

You will be childless now, mother, and widowed and alone; It must be hard to live on earth when all we loved are gone— To listen all the day in vain for one kind household tone— To know the world holds not one heart that we can call our own.

You'll think of me, my mother, in the solemn twilight hour, When the dew is on the rustling leaf, and on the folded flower; When the quiet earth lies sleeping, when the weary birds are still, And nothing but the cool night-wind is whispering on the hill.

When the lady moon is looking down o'er mountain, moor, and lea, You will sit in her holy light, and sadly think of me; And when the stars I loved so well shine out so sweet and fair, You'll look upon their glorious home, and think that I am there,

THE TUDORS.

HENRY VII.

L. You said, papa, that Henry made certain plans to increase his power; but he was hindered, in the early part of his reign, by plots and conspiracies—by the young Earl of Warwick, Lambert Simnel, and Perkin Warbeck.

P. Yes; and I said that when he had rid himself of his enemies, he proceeded with the plans he had formed.

How did he proceed? He thought to himself, “I want, first, to humble these haughty barons and priests who have disturbed my predecessors, and to raise the independence of the people; but I must first be independent of them all. Other kings have depended on the nobles and the people for their supplies of money, but I will save my money, and be independent. The less I trouble them for money the better; they will be more inclined to obey me.”

Now, Willie, I call such a thought a *sagacious* one. The methods which Henry adopted for raising money also showed great sagacity; but I am sorry to add that they were not *wise* ones; they were not right, and no one is truly wise who does wrong.

W. So that he wasn’t wise always. Well! no more was King Solomon.

P. Nor any one else. No man is always wise. Henry first began to raise the money

he required by treating his enemies badly. Instead of pardoning the nobles who had fought for Richard III., he confiscated their property to the crown, by which is meant that he took it from them, and kept it himself. In some cases he made them pay heavy fines instead; but both proceedings were unfair.

So also, after the rebellions of Simnel and Warbeck, Henry took the estates of those who had rebelled, and *fined* others, without proving that they were guilty: this second means was as unfair as the first.

The third means of gaining riches was not a very proper one. He pretended that he was going to make war with France, summoned the Parliament to grant him supplies for the purpose, and on receiving the money he put it in his pocket and made peace.

The history of this proceeding does Henry great discredit. He declared in Parliament, with his own mouth, that King Charles of France was a disturber of the Christian world, because he had cheated the Emperor Maximilian by not marrying his daughter. He pretended to be much shocked at such wickedness, and said that now he was determined to conquer the French, and claim the crown as his rightful inheritance.

The unsuspecting people were much excited by this; the war-

like spirit of the nobles was aroused once more. From one end of England to the other were heard the magical words, **CRESZY ! POICTIERS ! AGINCOURT !** and all said they were ready to fight such battles over again. Some of the nobles made preparations extensive enough to ruin themselves, and large bodies of troops were rapidly levied.

Those who knew Henry better, however, did not believe that he meant to fight: they said that he only wanted to make a *trade* of the war. The suspicions of many more were aroused when the king let the spring and summer go by without taking the field. At last, in October, he could scarcely help embarking for France, for there was ready for him a magnificent army of 25,000 foot and 1,600 horse. Accordingly he sailed for Calais, settled there, and pretended to besiege Boulogne. While the sham siege was going on, he bribed his principal officers with gold which he had received from the French king; they then agreed to a treaty, and persuaded the army that this was the best thing to be done.

The truth was, that the treaty had been secretly made by Henry with King Charles, three months before the army set out; and the French themselves knew that the landing of Henry's soldiers was a mockery on his part. Henry did more than make a treaty for peace; he made a bargain with Charles, selling him all the rights to the

provinces of France which the English had gained by their former conquests. For these claims the French agreed to pay Henry £200,000. Thus the king was a double gainer. He pocketed the money which the English paid him for making war, and all that the French had paid him for making peace. And he not only gained money, but increased his power over the nobles; for many of them had nearly ruined themselves—they had sold the greater part of their estates, expecting to make greater profits by the conquest of France.

The fourth way in which Henry raised money was more just. He caused many taxes on articles of commerce to be paid to him; but of this there was not so much complaint, for, as you will soon see, few kings have done so much as he did to improve commerce.

The fifth plan, which was carried out in the latter part of his reign, was a very unjust one; he extorted money from his subjects by a series of extraordinary fines; some were called *Benevolences*. The citizens of London alone were forced to pay him a benevolence of £10,000, when the war with France was proposed. Other cities had to purchase liberties and privileges, while he also made his subjects buy *confirmations of their titles*. The people, Lord Bacon says, were perpetually pilfered by an army of tax-gatherers and informers. He also raised money by calling in the coin, and by re-coining it, and raising it and lowering

it at his pleasure. These proceedings were carried out by two cunning lawyers, named Epsom and Dudley. The unjust, oppressive acts of these two men I cannot stop to record. Persons were committed to prison without being brought to trial, that they might purchase their freedom with heavy sums called *compositions*. They kept up an army of spies and informers in every part of the kingdom, and seized men's lands and goods without caring to recognise either law or justice.

By these means, however unjust, Henry became immensely rich. He cared neither for nobles, parliament, nor people; and made whatever laws seemed best for his kingdom's good.

I told you last week of the indifference of the Parliament to their duties; so in the latter part of the king's reign he dispensed with their help altogether—no parliament was held for seven years. The only important meetings were those in which they granted him a "benevolence" for the pretended war with France, and another in which they granted him £30,000 for the marriage portion of his eldest daughter.

Henry, being thus rich and independent, gained the power which he sought. His principal means of depressing the nobles was by a very important law which enabled them to sell their estates, or to divide their property, which they could not do before. The nobles were

much pleased at this law, for it enabled them to procure "ready money" to spend; and you heard how, when preparing for the war with France, many ruined themselves. The law was, indeed, fatal to the feudal system, as the crafty Henry had foreseen. Its effects were felt by the next generation, for the great estates of the barons were gradually dismembered, and the property of the commons and the merchants who had money was increased.

Henry also lessened the power of the barons by forbidding them to keep so many retainers, who (as in the case of Warwick the king-maker) helped in rebellions against the government, and in riots and disorder. This law was carried out with the greatest rigour and vigilance. Henry had on one occasion been entertained with great magnificence by his favourite general, the Earl of Oxford. On the king's departure, the earl drew up all his numerous retainers in splendid array, to do him honour. In reply to the king's question as to whom the train of people belonged, the earl smiled and confessed that they were his retainers, who had assembled because he was honoured by the royal presence. At this the king started back, and replied, "By my faith, my lord, I thank you for your good men; but I must not allow my laws to be broken in my presence." He then caused Oxford to pay 15,000 marks as a "composition" for this offence.

THE ENGLISH TRAVELLER.

LONDON—THE THAMES, BRIDGES, ETC.

"MY DEAR CHILDREN,

"Do you remember how, after taking a walk through London with my friend on the first day of my visit, he made arrangements for the rest of the week?

"On the second day he was to give me *a general account of London* in the morning, and we were to pay a visit to the *Thames* in the afternoon.

"On the third day, we were to visit the *ancient buildings*.

"On the fourth day, the *modern buildings*.

"On the fifth day, that most modern building, the *Great Exhibition*; and *

"On the sixth day, the *various suburbs* of London.

"You have now heard all the *general particulars* which my friend gave me; and I consider that he did a very good morning's work. His account included the size of London—the streets and houses—the number of people—the way in which they earn their daily bread—the quantity of food they eat—the manner in which they are supplied with water, fire, and light—their sanitary condition—the highways—burial-grounds—means of conveyance—moral condition—policemen—prisons—savings' banks—hospitals, schools, &c. By the time he had finished these numerous particulars, he was much exhausted; and I was not sorry to hear that luncheon would be ready in a few minutes.

"After luncheon we proceeded on our visit to the *Thames*.

"‘Cab!’ said my friend, on reaching the first cab-stand. ‘Waterloo!’ he added, to the cabman, who, instead of taking us to that famous village in Belgium, drove us to the South Western Railway Terminus at Waterloo Bridge. He was, however, quite right in doing so; for in less than five minutes after our arrival, we were spinning along behind an engine which was taking us to RICHMOND.

"‘See,’ said my friend, taking out the map while we were in the train, ‘here is Richmond, on the banks of the *Thames*. Now trace the *Thames* on the map to its source. You see that it divides Middlesex from Surrey, runs between Berkshire and Buckinghamshire, between Berkshire and Oxfordshire, between Wiltshire and Gloucestershire, and through part of Gloucestershire itself to a spot near Cirencester, where there is a little spring called *Thames-head*. Its entire length from this spring to the mouth is about 220 miles.

"‘It is not, however, a broad and deep river in all parts. Large ships of 1,200 tons burden cannot proceed higher than *Blackwall*; those of 800 tons can reach *St. Katherine's Docks*, which we shall soon talk about. Small steamers can travel as far as Richmond, the place to

which we are going, and one or two even go as far as Hampton Court; beyond that distance the river is only navigable for barges and small boats.'

"How wide is the river?" I said. "If you look at its mouth, beyond the *Nore*, there is a part which measures nearly eighteen miles across; at the *Nore* it measures six miles; at *Gravesend* its width is about half a mile; at *Woolwich*, a quarter of a mile; and at *London Bridge*, about 700 feet. But here we are at *Richmond*."

We stopped for half an hour at *Richmond*, and then returned by one of the steamers. On our way, we passed under the bridges which I described to you in a former letter.* Leaving *Richmond Bridge*, we passed under the new railway bridge, • *Kew Bridge*, *Hammersmith*, *Putney*, *Battersea*, *Vauxhall*, *Westminster*, *Hungerford*, *Waterloo*, *Blackfriars*, *Southwark*, and *London Bridges*. We then landed, crossed to the other side of the bridge, and entered one of the larger *Gravesend* steam-boats.

In our course to *London Bridge*, we had passed many pleasant villas and parks, belonging to the merchants of *London*, and had seen a great variety of scenery. On reaching the bridges connected with *London*, my friend gave me an account of them, which I think you would like to hear.

"*Westminster Bridge*," he said, "is the oldest of the bridges, and is in a ruinous condition; it

will soon be pulled down. It contains thirteen large and two smaller arches; it was finished in 1751.

"*Hungerford Suspension Bridge* is the most modern; it was opened in 1845. This beautiful bridge is only second to the Suspension Bridge at *Fribourg* in *Switzerland*; it contains 11,000 tons of iron.

"*Waterloo Bridge* contains some of the finest arches ever built; it has been said to be "worth a visit from the remotest corner of the earth."

"*Blackfriars Bridge*, like that of *Westminster*, is very old, and is wearing out. Both were built of *Portland stone*, which is too soft to resist the action of the water; so that their piers are much worn.

"*Southwark Bridge* is built of iron, with stone piers; it contains three immense arches; the central one has a span of 240 feet, and is the widest in the world.

"*London Bridge* was opened in 1831. It is built of granite; of its five arches, the central one has a span of 150 feet."

To help me to remember these particulars, my friend gave me the following table, which you also may read:—

Name of Bridge.	When opened.	Cost.	No. of Arches.
Vauxhall . .	1814	280,000	9
Westminster . .	1751	380,500	15
Hungerford . .	1845	110,000	3
Waterloo . .	1817	1,150,000	9
Blackfriars . .	1770	260,000	9
Southwark . .	1819	300,000	3
London Bridge . .	1831	2,000,000	5

You may learn this table; and in my next letter you shall hear what I saw on the other side of *London Bridge*.

Your affectionate friend,
HENRY YOUNG."

THE NEW YEAR'S SONG OF THE CHURCH BELL.

"A Happy New Year," saith the old church bell,
 As it rings in the clear air loudly;
 And its deep-toned echoes mount and swell
 To the pure blue heavens proudly.
 "A Happy New Year," quoth its iron tongue,
 To the blithe, and the sorrow-laden,
 To the grey-haired sire, to the stripling young,
 To the grandame, and fair young maiden.
 "I could tell much of the passing year—
 Much of its joy and sorrow;
 But a new-born one is hastening here,
 And I'll bid it a fair good-morrow."
 And again rung out the old church bell,
 With a strain of wildest gladness;
 Then sank from its loud triumphant swell
 To a wailing note of sadness.
 "Many who welcomed my joyous tone
 As I greeted the year now dying,
 Away to their last long rest are gone,
 And under the sod are lying;
 Age hath lain down with manhood's prime,
 And woman, her vigil keeping,
 Just closed the loved one's eyes in time,
 Ere she herself lay sleeping.
 "And childhood returns like a priceless boon
 Back to the Giver given;
 'Twas hard for the mother to yield so soon
 Her cherub back to heaven.
 Still I welcomed home each pallid one,
 With my slow and solemn knelling;
 Till they silenced my voice, lest its fearful tone
 Should reach the sick man's dwelling.
 "There are eyes that smiled on the last New Year,
 Shall smile on another never;
 There are hearts that throbbed for a proud career,
 Shall throb no more for ever.
 Oh! a gallant harvest old Death hath made,
 That stern and hoary reaper;
 And the busy sexton hath plied his trade
 O'er many a dreamless sleeper.
 "Yet a welcome blithe for the young New Year,
 With his untold joy or sorrow;
 He cometh an unknown stranger here,
 And we'll bid him a fair good-morrow.
 Still, part we as friends no more to meet
 With the year that hath just passed o'er us;
 While with chime and with peal we'll warmly greet
 The unveiled one before us.

R. A. P.

SONGS FOR THE MONTHS.—FEBRUARY.

To A WINTER WIND.

Set to Music for "PLEASANT PAGES," by G. CHALOMER.

Loud wind, strong wind, blowing from the mountains, Fresh wind, free wind,
Loud wind, strong wind, blowing from the mountains, Fresh wind, free wind,
sweeping o'er the sea. Pour forth thy vials like torrents from air-
sweeping o'er the sea. Pour forth thy vials like torrents from air-
fountains, Draughts of life to me! Draughts of life to me!
fountains, Draughts of life to me! Draughts of life to me!

* * * The small notes are required in some of the stanzas only.

Clear wind, cold wind, like a Northern giant,
Stars brightly threading all thy cloud driven hair,
Thrilling the black night with a voice defiant,
I will meet thee there.

Wild wind, bold wind, like a strong armed angel,
Clasp me round—kiss me with thy kiss divine!
Breathe in my dulled heart thy secret sweet evang—
Mine, and only mine!

Fierce wind, mad wind, howling through the nations,
Know'st thou how leapeth that heart as thou sweep'st by,
Ah! thou wouldest grieve a while in a gentle patience,
Like a human sigh.

Sharp wind, keen wind, piercing as wood-arrows,
Empty thy quiverful! pass on! who's fit to stand
Though in some burning eyes life's whole bright circle narrows
To one misery!

Loud wind, strong wind, stay thou in the mountains!
Fresh wind, free wind, trouble not the sea!
Or lay thy freezing hand upon my heart's wild fountains,
That I hear not thee!

CHAMBERS'S EDINBURGH JOURNAL.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

6th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO MADE CANALS.

P. You would have liked to hear the Lancashire people as they talked of James Brindley, about 100 years ago.

"Who is JAMES BRINDLEY?" one would ask, perhaps. "How can such a rough-looking country fellow think of undertaking such a difficult work? You don't think, do you, that he can make the duke's canal from Worsley to Manchester?"

"Not he!" another might say. "Why, I have known him these twenty years. He spent the first seventeen years of his life as a mere country labourer; and, what is more, he has never been taught to read or write. No one has taken the pains to educate him."

In this way, perhaps, the people would talk of James Brindley; for many were disposed to laugh at him; they thought him presumptuous to try and form the Duke of Bridgewater's canal.

Perhaps, however, when these people talked of James Brindley, somebody would be present who knew him. And he would speak in a different strain. "I can tell you," he would say, "that you do not know this man properly. Let me tell you something of his early life."

"James Brindley was born at Tunstall, in Derbyshire, in the year 1716. His father was very poor, so he let his boy grow up, with all kinds of companions, where his only chances were to learn bad habits, and get no education. Scarcely any one taught him anything good; and, even now, he cannot *read*; while, as for *writing*, he can almost sign his name, and that is all. So I suppose that he scarcely ever got an idea out of a *book*; he gets his thoughts from all that he sees round about him.

"Well!" the speaker would continue, "all these things are very much against him, of course. But I can tell you that he's a man who *likes* to have things 'against him'; he likes to have something to push against; he seems made on purpose for it. When he was about seventeen years old, he began to feel the power within him. The power which makes men do hard things we call *determination*. And, when he felt so much determination in him, he thought, 'I should like something harder to do than driving a horse and cart;' so he went to Macclesfield, in Cheshire, where he bound

himself apprentice to a millwright."

A millwright, you know, is a man who makes machinery for mills. Now, he must be *very* determined who can learn to make mill-machinery, and yet not be able to read. "So," the speaker would conclude,— "James Brindley is the right sort of man to make a canal; and, mind you, I say that he will do it. Mark my words! that determined man will certainly 'carry out the duke's wonderful plans.'

"Yes," another would add, "I say, too, that he will, just because he *likes anything hard to do*. I can tell you something more about him. His master, Mr. Bennett, did not know much about his business, so he used to leave young Brindley by himself for whole weeks, to get through his work the best way he could. But this was an advantage to him; for he always would get his work done 'somehow'; he would make his inventive faculties work to find out how his duties were to be done. And he always *did* find out the way, and *did* what he wanted.

"Let me tell you only one thing," he would add; "just to show how determined he is. His master, Bennett, some time ago, was employed to build a paper-mill. The poor man had never seen one before, so he went off to a distant part to inspect it. His observations, however, were not of much use to him. When he returned, he could not succeed with the mill; he had only bewildered himself.

"Now, Brindley himself had never seen a paper-mill, but when he was helping his master, he soon began to suspect that the thing was not being done properly. So he said nothing to any one, but waited till his week's work was over; then he set out alone, across the distant country, to have a look at the mill himself. He reached the mill, and examined all its minute parts. He could not, however, make any note of them; he only entered his observations in his head, looking over the machine again and again, until he felt himself perfect master of it. He then returned to his work in good time by the Monday morning, having travelled the whole distance of fifty miles on foot. On the Monday morning he set to work again by himself; and, to the surprise of all, he corrected his master's mistakes, completed the whole machine, and even improved it. Now, friends! what I mean to say is, that such a man as that has spirit enough to do anything. Trust him! he'll make the canal somehow. He'll bore through mountains and rocks, and he'll cut his way through any place, you'll see, if the duke will only try him!"

So all the people who were talking about Brindley, agreed that he would be able to make the new canal.

L. And did the Duke of Bridgewater try him?

P. Yes. Try and imagine the man talking to the duke. It is said that Brindley was "as plain-looking a man as any

of the boors of the Peak, or as one of his own carters ; yet, when he spoke all ears listened, and every mind was filled with the wonders which he pronounced practicable." The duke knew this, and had therefore sent for him. I can imagine that the duke would say, "Now, Mr. Brindley, I have heard of your astonishing perseverance; I have heard of the great water-engine you made for draining the coal-mine at Clifton; I have heard of the new silk-mill you erected at Congleton, in Cheshire; and of the steam-engine you erected at Newcastle-under-Lyne for saving one-half of the fuel;—do you think you can apply your ingenuity to the making of a canal?"

Brindley, you must remember, never had made such a thing; but that mattered not to a man of his spirit; he undertook to survey the ground, and see whether it could be done. Accordingly you might soon after have seen a rough-looking man, with lines and surveying instruments, hard at work measuring the ground from the Worsley coal-mines to Manchester. He found that there were some tremendous difficulties to get through; yet, as I told you last week, he reported to the duke that he would undertake to surmount them.

The duke then resolved that in making the canal every part of the work should be done in the most perfect manner. One great difficulty seemed to be that of getting a supply of water.

When the country through which the water flows is uneven, it is usual to divide the canal into sections of different levels by means of *locks*. But as this plan causes some waste of the water, it was decided that there should be one level throughout, without any locks. This plan, however, increased the other difficulties of Brindley, as he would have to carry the canal under high hills, and across wide and deep valleys. Many people, therefore, said, as before, when they heard of Brindley's plans, "Oh, he cannot possibly do it." Many laughed, and thought that the duke was only going to waste his money.

The surprise of the people was not lessened when they saw how Brindley commenced his work. Having found out which was the proper level for the canal, he began in the heart of the coal-mountain at Worsley: here he formed a large basin for a supply of water, and he then bored a tunnel three-quarters of a mile long, from the basin to the other side of the hill. How he continued the canal across the country, I cannot tell you; you must go to Lancashire to see the work itself, to understand its merits. He had fixed the level of the water, and to that level he kept it, either by cutting or boring, or making high banks, or brickwork on which the water could flow. He not only directed the workmen, but helped them by inventing new machines; he also took care to have everything done

in the cheapest way. For instance, having excavated gravel and clay from one place, he used it for making embankments, or for making bricks, in another. These materials were carried in boats which opened at the bottom, and dropped their load into the place where it was required, without trouble. So great was the care of the great engineer, that he seemed ready for every difficulty that he met with; and so great was his *forethought*, that he made no blunders; he never had to undo anything that he had done.

Yet with all his power of invention for getting through the work easily; with all his calculations to save expense; with all his care and forethought, the work was a very heavy one; the difficulties were gigantic, and what was worse, so was the *expense*. The duke was a very rich man, and he gave up his money freely: he spent thousands upon thousands of pounds; and instead of living like a rich noble, he devoted all his money, except £400 per annum, for the purpose. All the people of England knew how poor he had made himself, for every one was watching and talking about the wonderful work; and when the duke tried to borrow £500 at the Royal Exchange, no merchant would trust him. They said that he had ruined himself, and that they should never get their money back again if they lent it him, because his fine canal scheme must all come to nought. So the people of Lancashire laughed at Brindley once

more. Indeed all people made a great outcry—they ridiculed Brindley for attempting impossibilities, and the Duke of Bridgewater for being so extravagant.

But the duke was, fortunately, as unflinching and determined as his engineer. He had made up his mind that the thing should be done, so he shut his ears to the peoples' remarks, and set about raising more money in every possible way. His agent, Mr. Gilbert, was kept constantly employed in riding up and down the country offering the duke's "promissory-notes" in exchange for money. Thus more money was raised; and the work was carried on.

But when the undertaking was nearly finished, the greatest difficulty of all presented itself—the canal, to be brought into Manchester, must be *carried over the river IRWELL*, on which Manchester is situated. So, when the people heard that this was to be done, they all laughed again. They asked, "How can you carry a canal over a river?" and many said 'twas impossible. Even the duke began to wonder how it was to be done; but as for the daring Brindley, nothing could dismay him. He said he would rear an immense bridge of three arches across the river, and that his canal should flow over this bridge, while the Irwell flowed under it. Such a bridge we call an *aqueduct*. The duke, however, was staggered at the idea; the centre arch was to rise forty feet above the

river. The ridicule of the people, too, was increasing; and they still cried—"Pooh! impossible!"

Brindley, therefore, thought he would convince the duke that the design was practicable, before he ventured to ask for so large a sum of money as the bridge must cost; so he procured another engineer to examine his plans, and give his opinion upon them. Brindley brought him to the spot, by the side of the river where the aqueduct was to be built, and explained how he meant to do it; but, alas! the engineer was as hard to persuade as the people—he only shook his head, and remarked that "he had often heard of castles in the air, but never before was shown where any of them were to be erected."

Never mind! Such opposition did not discourage Brindley—it only called forth more of his determination—he declared the more loudly that he could do it, and that it should be done. The duke believed him, and the bridge was therefore put in hand. In September,

1760, it was begun, and on the 17th July following, it was finished. On that day the people who had said "Pooh," and those who had said "Impossible," were silent. They were silenced by the sight of a noble aqueduct, 600 feet long. They gazed at it with wonder, and they were awed into silence once more when the first boat passed over it, floating on THE BRIDGEWATER CANAL. Over the new canal it glided in silence, yet it spoke—ah! it spoke with a power which all people felt; it gave them a silent lesson on the sure triumph of industry, of determination, and of perseverance. Oh, it was a beautiful sight! What thoughts of James Brindley must the workmen, the Duke of Bridgewater, and the spectators have had then! It was novel and pleasant, too, as the boat glided over the canal, to see a great vessel with all its masts and sails standing undisturbed, directly under the boat's keel.

There were other triumphs, too. I wish there was time to tell you of them now, but they must be left until next week.

THE STORMY PETREL.

Up and down! up and down!
From the base of the wave to the billow's crown,
Amidst the flashing and feathery foam,
The stormy Petrel finds a home;
A home,—if such a place can be,
For her who lives in the wide, wide sea,
On the craggy ice, in the frozen air,
And only seeketh her rocky lair
To warm her young, and teach them to spring
At once o'er the waves, on their stormy wing!

B. W. PROCTER.

THE TUDORS.

HENRY VII.

P. You heard last week how Henry acquired power for himself, and depressed that of the nobles; but you did not hear how he sought to improve the people.

This latter object was partly gained by the means taken to destroy the feudal system. You know, from your previous History lessons, that most of the towns were in the neighbourhood of some great castle, where a powerful baron resided as their lord and protector. You have heard, too, that this was not always the case; and that in many instances, where the castles had been destroyed, the nobles had built themselves large wooden mansions, or *halls*, instead. The greater number of towns, however, were still under the control of some baron; his castle was not only a fortress for protection, but a prison for criminals. It was often frequented, too, by a host of idle guests. But as the nobles were rendered less powerful by Henry, the people became less dependent, and could act more according to their own wishes, or the king's.

A second step to the establishment of order was the institution of the *Court of Star Chamber*. It was intended to put down certain associations of individuals under a chief, whose livery they wore; while they bound themselves by oath to maintain his private quarrels.

After rendering the people more free from the influence of the nobles, Henry's third plan was to teach them industry, and improve their commerce. He therefore tried to remove the towns from the neighbourhood of the castles to situations more convenient for trade—such as the vicinity of some river or of the sea. Here he taught them the *advantages* of industry; he also taught them to be frugal, and to pay their debts—in both of which points he set them an example. At the same time, in his treaties with foreign princes he made provisions for the advantage of commerce, and for securing the rights of the British merchants. The active people of the commercial towns thus depended on themselves, the laws, and the king; therefore, they soon presented a favourable contrast to the towns dependent on the barons.

Let me stop here for a moment to tell you that even in the present day these baronial towns are not all extinct. Last year, I visited a town in Sussex, in which the most important place was the great castle of the duke who lived there. I found that a large number of the houses belonged to the duke, and that the tradesmen depended chiefly for custom upon him, and other families in the neighbourhood. But there was little industry or commerce in the

town; it was a quiet sleepy place: the week-days were as quiet as the Sundays. There was only one inn, and its sign was the duke's arms. The duke even professed the ancient religion of the feudal times, but he has since become a Protestant. He is, however, very different from the ancient barons; for when I talked about him, the people spoke of him as a kind man. He not only tried to help them, but he cared for the poor, and did them good. There is a railway-station within three or four miles of the town, but it has not done much to rouse the people to activity. There is more than one such town still to be found in England.

But the commercial towns which Henry promoted must have been very interesting objects to him. In this king you may see how contradictory is human nature; for although he was selfish and unjust; yet he took delight in the good of the people. He even took care to help the poor, that they might obtain justice from their superiors. This had never been easy to obtain from the rich because of their great power, and because of the expense of the fees to the lawyers. Henry therefore provided that those who were very poor might sue for justice without paying the law-fees. They were said to sue *in forma pauperis*, which means "in the manner of a poor man." This practice is still in force; any poor man who takes an oath that he does not possess five pounds, if he has a just cause to be tried, and can

procure a certificate to that effect from some lawyer, may enter an action *in forma pauperis*.

By the removal of the towns, the encouragement of industry, and other means, the race of "serfs," the lowest order dependent on the nobles, became almost extinct. One great reason for this was that the barons did not want them. There were scarcely any wars except the civil wars and insurrections, which the cautious Henry could not prevent. A second reason was, that there was no need for them to depend on the barons. In those times of peace, the useful arts made rapid progress: tilers, brick-layers, and glaziers, were much sought after; and there was plenty of work to do. Wages were nearly four times as high as in the century before, and every serf was thus able to get his own living.

The king, moreover, determined that all who were able should work. He not only encouraged industry, but enforced it. A law was made, that if any unemployed person refused to work he might be imprisoned. But, sagacious as Henry was, he made another mistake; although, in this case, he acted with a good intention. His mistake was in attempting to regulate the price of wages by law; for it has since been found that such matters should be left to regulate themselves. The following is a copy of the rate of wages in the statute of 1496, and according to this table all were compelled to work:—

WAGES APPOINTED FOR ARTIFERS.

	BETWEEN EASTER AND MICHAELMAS.		BETWEEN MICHAELMAS AND EASTER.	
	With Diet.	With- out.	With Diet.	With- out.
A free mason, master-carpenter, rough mason, bricklayer, master-tiler, plumber, glazier, carver, joiner	.	4d.	6d.	3d.
Other labourers, except in harvest	.	2d.	4d.	1½d.
In harvest every mower by the day	.	.	.	4d.
A reaper ditto	.	.	.	3d.
A carter ditto	.	.	.	3d.
A woman, and other labourers, ditto	.	.	.	2½d.
				4½d.

Another mistake was that of trying to regulate the prices of manufactured articles. There were many others, such as prohibiting the importation of silk, in order to *protect* the English silk manufactures—prohibiting the exportation of horses or money; and worse still, the granting of “exclusive” privileges in trade to certain bodies of merchants, so that no one else might buy or sell what they traded in. These bodies of merchants or companies were called *corporations*, and the trade which was thus confined to themselves alone, was called a *monopoly*. These abuses, which Henry began with good intentions, were extended in succeeding reigns, as you will see. In the present day, however, such evils are nearly all removed. Every one is beginning to see that commerce must be left to act *naturally*, and that its laws should not be interfered with, any more than the laws of nature.

You have now heard of the principal events of this reign. In the year 1509, the time of Henry's death came. In one of the history books, the summary of his reign is well given. It is said, that “having seen England civilized by his endeavours, his

people pay their taxes without constraint, the nobles confessing their subordination, the laws alone inflicting punishment, the towns beginning to live independent of the powerful, commerce every day increasing, the spirit of faction extinguished, and foreigners either fearing England or seeking its alliance, he began to see the approaches of his end, and died of gout in his stomach, having lived fifty-two years, and reigned twenty-three.”

The character of Henry is worth considering. The changes for good which he made in the manners and condition of his people should be always remembered with gratitude. He was a famous *king*, but he was not a good man. He was certainly “a faithless friend, and a bitter enemy”—he treated his wife unkindly because she belonged to the house of York; he behaved well neither to his mother nor his son. His ruling vice was avarice, as you have no doubt observed. Certainly he did not die in *debt*, as the kings before him had done; but before his death he amassed the incredible sum of £1,800,000, which was equal to nearly £16,000,000 in these days.

THE ENGLISH TRAVELLER.

THE THAMES—THE PORT OF LONDON—THE DOCKS.

"MY DEAR CHILDREN,—

"I said that after crossing London Bridge we entered a Gravesend steamer. On this (the eastern) side of the bridge is the beginning of the *Port of London*. The port extends from the bridge to Blackwall, and beyond, a distance of more than six miles. The confused appearance of the scene, from the crowds of ships, the vast 'forest of masts,' the number of black-looking 'colliers,' I have alluded to in a former letter. For a long distance the surface of the river is covered with ships, except a channel about 300 feet wide, which is left clear for the craft to pass up and down.

"I wonder," I said to my friend, "that there is not more confusion than there seems to be with so many vessels."

"There was during the last century," he replied. "The fleets of merchantmen often blocked up the port; so that it was resolved to excavate great docks to accommodate the ships. In 1802, the West India Docks were opened; in 1805, the London Docks; in 1808, the East India Docks; and in 1828 the St. Katherine's Docks were also opened. These docks contain, as you may imagine, a vast number of ships; I think that you would like to visit them."

"Yes," I said, "I should. We will just visit one set of docks."

"Accordingly we landed at Blackwall, travelled back to

London, and entered the London Docks.

"The cost of some of the docks," said my friend, "is even more surprising than that of the bridges. These London Docks cost the immense sum of £4,000,000; the thick outer walls cost £65,000."

"We then entered the dock; and after I had been inside for an hour, I was not surprised at the expense of building such a place. I was more surprised at its size. It covers altogether nearly 100 acres of ground. There is one grand enclosure of twenty acres of water; and this is surrounded by immense warehouses for 'bonded' goods. Besides, there are several smaller enclosures, each being surrounded by similar gigantic buildings.

"Astonished as I was at these places, and at the endless space covered with bales, boxes, bags, and barrels, I was more excited on visiting the vaults below. I was taken by my friend to the *Tobacco-warehouse*, which is the largest covered building in the world. It occupies five acres of ground, and has space for 24,000 hogsheads of tobacco.

"I waded through this immense field of hogsheads for some time, when my friend told me that he had a more remarkable sight for me yet. 'I have,' he said, 'a "tasting-order," given me by my wine-merchant; and with it we can obtain

admission to the vaults beneath, to taste his pipe of wine.'

"Accordingly we went down to the wondrous vaults under the tobacco warehouses; and I soon felt that I had no words which can give you any description of such a place. The vaults are the principal wine-stores of England; they are arched with brick, and extend, in one direction, in one long line for the length of a mile. As we entered, we found that the cellars were dark.

"How shall we proceed?" I asked. "Wait," was the reply, and presently a cooper came to accompany us, carrying a light; my friend also carried a light. "Now," he said, "let us go."

"Then on we went! Can you imagine us going on? I remembered walking through OXFORD STREET, which is a mile long; but that was nothing to this. There we had pleasant shops on our way, but here, on both sides, were nothing but the immense pipes of wine, which seemed to be without limit. Indeed, I felt that I was in a silent underground city, breathing a strange atmosphere which smelt and even tasted of wine. Besides the large main street (or passage) there were many turnings; these lanes were also of great length. In the whole vaults there is room for 65,000 pipes of wine.

"When my friend reached his wine-merchant's pipe of wine, the cooper pierced it, the wine was tasted, and we returned. On reaching the open air I felt quite giddy, for the fumes of the atmosphere had

almost intoxicated me. My friend smiled at me, and said that if he had thought of it, I should have had a substantial meal before entering, to prevent such effects.

"We then travelled towards the dock-gate again, that we might return home; but I was almost unable to bear the tumult of the busy scene through which we passed. Without taking the trouble to describe to you what we ourselves saw, I will give you an account which has been written by a well-known author, Mr. Henry Mayhew. He says:—

"As you enter the dock, the sight of the masts in the distance, and the tall chimneys vomiting clouds of smoke, and many-coloured flags flying in the air, has a most peculiar effect: the sheds with the monster wheels arching through the roofs, look like the paddle-boxes of huge steamers.

"Along the quay you see, now men with their faces blue with indigo, and now gaugers with their long brass-tipped rule dripping with spirit from the cask they have been probing. Then will come a group of flaxen-haired sailors, chattering German; and next a black sailor, with a cotton handkerchief twisted turban-like round his head.

"Presently, a blue-smocked butcher, with fresh meat and a bunch of cabbages in his tray; and, shortly afterwards, a mate with green parroquets in a cage.

"Here you will see sitting on a bench a sorrowful-looking woman with new bright cooking-

tins at her side—she is an emigrant preparing for her voyage.

" As you pass along, at one time the air is pungent with the scent of tobacco; at another, you are overpowered with the fumes of rum. Then you are nearly sickened with the stench of hides and huge bins of horns; and, shortly afterwards, the atmosphere is fragrant with coffee and spice. Nearly everywhere you meet stacks of cork, or yellow bins of sulphur, or lead-coloured ore. As you enter the warehouse, the flooring is sticky, as if it had been newly tarred, with the sugar that has leaked through the casks; and, as you descend into the dark vaults, you see long lines of lights hanging from the black arches, and lamps flitting about midway. Here you sniff the fumes of the wine, and there the peculiar fungous smell of dry-rot.

" Then the jumble of sounds, as you pass along the dock, blends in anything but sweet concord. The sailors are singing boisterous negro songs from the Yankee ship just entering—the cooper is hammering at the casks on the quay—the chains of the cranes loosed from their weight rattle as they fly up again—the ropes splash in the water—some captain shouts his orders through his hands—a goat bleats from some ship in the basin—and empty casks roll along the stones with a dull drum-like sound.

" Here the heavy-laden ships are down far below the level of the quay, and you descend to them by ladders, whilst, in another basin, they are high up and

out of the water, so that their green copper sheathing is almost level with the eye of the passenger; while above his head a long line of bowsprits stretches far over the quay, and, from them, hang spars and planks as a gangway to each ship.

" This immense establishment is worked by from one thousand to three thousand hands, according to the 'brisk' or 'slack' nature of the business."

" If, dear children, you imagine such a scene spread over nearly 100 acres of ground, you will get some idea of the London Docks. Then, think of the other large docks, which are almost as well filled, and you will thus get a faint impression of the wonderful extent of London's commerce. But, when you remember the enormous quantity of goods consumed in London alone, you will not, I am sure, wonder that such docks are necessary.

" Before closing my letter, I may as well tell you that the St. Katherine's Docks are the nearest to London; the London Docks are next; then the West India Docks; then the East India Docks.

" I was on the whole much pleased with my visit to the Thames. The bridges, the pool, and the docks of that noble river are truly interesting subjects. But I am tired now, dear children, and having done with my subject I beg to say good-bye!

" Your affectionate friend,

" HENRY YOUNG."

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS—PREPOSITIONS AND CONJUNCTIONS.

*L*esson 8.

THE PREPOSITIONS.

*I*on. We have learned of five classes of words—1st, The *nouns* of things, called **NOUNS**; 2ndly, The words which express the *qualities* of things, called **ADJECTIVES**; 3rdly, The words used *instead of nouns*, called **PRONOUNS**; 4thly, The words which signify *doing something*, or *being done to*, called **VERBS**; 5thly, The words *added to verbs to tell us something about them*, called **ADVERBS**. Shall we make a memory lesson about them?

P. No; we will first learn of *all* the classes. There are certain words which show the relation between other words. Can you understand that?

W. No. I did not know that words could be "relations."

P. The word "relation," Willie, merely means a *connection*. I may say I stand *above* you, and I may then say I stand *behind* you. These are different connections.

W. Yes; the first connection is that you are *above*, the second that you are *behind*.

P. Here are some more connections between you and me.

I have something good to say *of* you. I have something good to say *for* you. I have something good to say *to* you.

W. There are three more connections—*of*, *for*, and *to*. I like the last. Have you anything good to say to me?

P. Yes. Here is "something good." You may now easily discover a class of words different from those you have learned before.

W. I can see which words you mean. I will say them—before, behind, of, for, from; these words show the connection between the other words.

P. And such words are called **PREPOSITIONS**. "Preposition" means *placing before*. Make some sentences with prepositions in them, and you will see that the preposition is either before a noun or a pronoun.

*I*on. I will make two sentences. John is laughing *with* me. My sister is laughing *at* me. Both the prepositions are before the pronoun "me."

L. I will try some sentences. Nelson fought *for* his country. Go *to* bed. I am *on* the couch. Think *about* your lesson. Go *beyond* the common.

So the preposition is another *servant* of the noun, for it cannot be used unless it is placed before a noun or a pronoun; it depends upon it, and is joined to it. Let us make its "definition."

*D*efinition.—The words which show the connection between other words are called **PREPOSITIONS**. They have that name because they are generally *placed before* a noun or pronoun.

*E*xamples.—To, for, with, from, by, unto, upon, through, in, at, of, beyond.

P. I may remark that, origi-

nally, prepositions showed the relations of *place*. Suppose that you take a ball in your hand and throw it, then tell me where you throw it to. You will find that you must use a preposition every time, to show the relation between the verb "throw," and the place where the ball is thrown. Take this ball in your hand, Willie, and tell me in what place you will throw it.

W. Yes; I will throw it through the window. I will

throw it in the air. I will throw it over the moon. I will throw it into the sea. I will throw it beyond that desk. I will throw it under the table. I will throw it before his face. I will throw it behind his back. I will throw it up to the sky. I will throw it down to the ground.

P. That will do. You thus see how many prepositions show the connection of *place*. Now, attend to your Parsing Exercise.

No. 8. PARSING EXERCISE.

I danced with papa. He danced before papa. She danced nicely with the brother of her friend. I will eat my breakfast soon. Send the umbrella for Mary. Lend an umbrella to Mary. I want my needle-box; send it by Mary. Wait! I will consider—put it carefully in a parcel with the little needle-box. John's sisters are in the parlour; they [are going] [to stop] to tea. Accept from me a present for the baby; it is in the box on the table, behind the door of the little room.

Lesson 9.

THE CONJUNCTIONS.

There will be time to-day to point out another class of words. Tell me what word is wanting in this sentence—

I will go out it leaves off raining.

L. The word *if* is wanted.

W. Or you might put in the word *when*.

Ion. Or the words *as soon as*, *directly*. You may say "as soon as" it leaves off raining.

P. True; and of what use would any of those words be if you placed them between the parts of the sentence which are separated?

W. They would join them

together, of course. I suppose you are going to teach us about words which join parts of sentences—"joining-words."

P. Yes. Here are some more—

John and Jane are ill. John or Jane may get well.

Here the nouns John and Jane are joined by the words *and*, *or*. Such words are called "Conjunctions," from two Latin words which mean *joining together*.

Ion. I can soon make the definition of those words.

Definition—A word which joins two parts of a sentence together, or two nouns, is called a CONJUNCTION.

Examples—And, or, as soon as, when, if.

No. 9. PARSING EXERCISE.

Mary and I [are going] to school. We wanted [to go] yesterday, but we did not. The man [was punished] because he robbed papa. I am happy when I am well; and I am miserable when I am ill. I often wear flat shoes, or slippers, for I have tender chilblains, with corns.

THE FOREIGN TRAVELLER.

CONSTANTINOPLE—THE DERVISHES.

"**M**Y DEAR CHILDREN,—
"I dare say you don't know what a *Dervish* is? Never mind! let me have the pleasure of telling you.

"We must not leave Constantinople without seeing the Dervishes," said the Russian countess, the day after our visit to the slave-market; "they are numbered amongst the principal lions of the city." From all I had heard of them I would rather have left them unseen, but finding that my companion wished to go, I could not refuse to escort her. On our way we had some talk about these creatures.

"*Dervish*," said the countess, "is a Persian word, it signifies poor and needy. The Mohammedans use it to describe a person who has become poor because he has devoted himself to religious services instead of work. The Arabians call such a person a *Fakir*. Amongst those who are of the Roman Catholic persuasion we find similar persons; they are called *Monks*, sometimes *Hermits*; the women are called *Nuns*. It is very likely that the Mohammedans, and others living this kind of life, got the idea of doing so from the ancient Jewish prophets. You remember, I dare say, how St. John the Baptist lived in the wilderness, wore camel's hair, and ate locusts and wild honey?"

"Yes," I replied; "every

94

one remembers John the Baptist."

"I dare say that Mahomet studied his history; for he taught that it was *meritorious* thus to become poor; he taught that if men lived apart from the world, with their thoughts turned away from their relations and friends, they could thus more easily turn their thoughts to God. "Let the people be poor," he thought, "that they may not love riches better than my word." So in his sacred book, called the *Koran*, he wrote these words—"See that ye come poor before God, for the poor shall have the first place in his mansion;" and poverty, you know, is a very easy virtue."

"Yes," I replied; "so, I suppose that there are plenty of dervishes."

"There were," said the countess; "but there are not so many now, for it has been found out that they are not all good men: people, therefore, do not trust in them. Those we are going to see are called *Dancing Dervishes*. Of course you have heard of the great fast which the Mohammedans practise in the month of Ramazan. These dervishes not only fast during that month, but on every Thursday. They claim great merit because they worship God in a peculiar way: a pipe is played to them, and as soon as they hear its sound they

twirl round, and continue doing so until the music stops.

" Dervishes were popular about 700 years ago. An order called *Rufis* was then founded, and they claimed to be very religious because some would hold a piece of red-hot iron between their teeth until it became cool, while others would cut themselves with sharp instruments.

" And then there is an order called *Calendars*. The dervishes of this order wear a peculiar dress of sheep or tiger's skin, or parti-coloured cloth. Some wear a dress of iron, while others wear scarcely any clothing at all; they are half-naked, with their skins painted red or black; they have feathers in their ears, and a fanciful-shaped hat, something like that of a magician or conjuror. They may remind one of the *street-conjurors*; for in their girdles they carry plates in which to receive charities. They also pretend to be inspired, and visit the coffee-houses, and other places, to preach; but they are not much listened to. The fact is, they are thought to be hypocrites who put on a sanctimonious appearance, as a pretext for idleness. Some are worse than idle; they indulge in wicked vices. But here is the mosque; let us enter."

" As we came into the mosque we were stopped, for we were going to tread on 'holy ground.' ' You must take off your shoes,' we were told. This was not pleasant, but we found that instead we might, if we chose, put our feet in a pair of slippers, of which there was a heap lying

at the door. Accordingly we did so; we paid a few paras for the loan; then scuffling into a rather dark room, we took our places amongst a number of 'Franks,' who were squatting in the Turkish manner on the floor, in a small place railed off from the rest of the building.

" We waited about ten minutes, when an invisible musician struck up a fantasia on something; it sounded like an asthmatical clarionet. This clarionet sounded forth some brilliant flourishes; and was then joined by some instrument of the *hurdy-gurdy* species. After we had listened to a long sleepy duet, twenty-six dervishes entered, seating themselves in a circle. one, who appeared to be the superior, was distinguished by a piece of carpet to repose upon.

" After remaining motionless awhile, they arose and paraded in single file around the mosque, each one making an obeisance as he passed his chief. Then, with outstretched arms and closed eyes, each devotee began to revolve on his own axis, performing at the same time a circuit of the arena. Each gradually increased the speed of his gyrations until he seemed overcome with religious fervour, or giddiness; for his head sunk on his shoulders, and his quivering lips were white with foam. After seeing some half-dozen of these human tops drop panting and exhausted on the pavement, I had quite enough of the exhibition, and ventured to hint as much to the countess. To my joy, I heard that

she too had perfectly satisfied her curiosity, and was anxious to vary the amusement.

"Our dragoman wished us to pay a visit to the HOWLING DERVISHES; but that was more than I could possibly endure, so we returned home.

"Well," said the countess on our way home, "it was a hideous spectacle, and a very sad one."

"Very," I replied. "It is very humiliating, too, that men should be so deluded. Do you think they really imagine they are serving God by their barbarous shrieks and antics?"

"I am afraid not. They are, as I said, known principally for

their bad qualities; they are notorious for their fondness for opium and intoxicating drinks; but they have convents in most Mohammedan countries.

"The religion of the Turks, and their manners and customs are worth remembering," said my companion; "and as I have seen much of these people at different times, I will give you an account of them."

"But I have not time, now, dear children, to tell you all the countess said; so I will send you her description of the Turks in my next letter.

"Believe me
Your affectionate friend,
"UNCLE RICHARD."

THE CROCUS'S SOLILOQUY.

Down in my solitude under the snow,
Where nothing cheering can reach me;
Here without light to see how to grow,
I'll trust to nature to teach me.

I will not despair, nor be idle, nor frown,
Locked in so gloomy a dwelling;
My leaves shall run up, and my roots shall run down,
While the bud in my bosom is swelling.

Soon as the frost will get out of my bed,
From this cold dungeon to free me,
I will peer up my little bright head;
All will be joyful to see me.

Then from my heart will young petals diverge,
As rays of the sun from their focus;
I from the dark mass of earth will emerge
A happy and beautiful Crocus!

Many, perhaps, from so simple a flower
This little lesson may borrow—
Patient to-day, through its gloomiest hour,
We come out the brighter to-morrow!

H. F. GOULD.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

7th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO MADE CANALS.

P. LAST week I did not tell you of all the good fruits of JAMES BRINDLEY's industry.

His patron, the Duke of Bridgewater, had spent nearly all his property in making the canal: but in time he was richly repaid; the coal-mines at Worsley were now very profitable, as the coals could be conveyed to Manchester at little expense. The duke also had confidence to make other canals; a branch canal was formed, uniting Manchester with the great commercial town of Liverpool; this also was constructed on one level throughout, and was carried over the Mersey, on which river Liverpool is situated, by an aqueduct like that over the Irwell.

Before this canal was completed, the cost of the carriage of goods between Manchester and Liverpool was twelve shillings per ton; the charge was now reduced to six shillings per ton, at which price it yielded the duke a good return. The profits arising from the duke's canals at length produced him a splendid income. It was said to have been, at one time, nearly £80,000 per annum; he himself once estimated it at £110,000; and at

his death, which happened in 1803, he left £600,000 in the funds, besides his large property in lands.

No doubt it was pleasing to Brindley to see his patron thus rewarded; but he must have been even more pleased at the good he had done for his country. Soon, nothing was talked of but canals. When the landed proprietors and rich men saw the Duke of Bridgewater's success, they followed his example. Indeed, before the BRIDGEWATER CANAL was finished, Brindley was engaged in making surveys for another of even greater importance.

The new canal was to pass through the county of Stafford, in order to connect the rivers Trent and Mersey, and thus form a complete intercommunication between the east and west coasts of England. You will understand this by looking at the map. The scheme, like that of the Bridgewater canal, was thought impossible to be executed; but it was all the more pleasing to Brindley on that account. He made the survey, and found that to execute the work he must bore, through a hill, a tunnel two thousand eight hundred and

eighty-eight yards in length, which was just the sort of difficulty he liked to encounter. Accordingly, he was allowed to encounter it; and the thing was done. When the canal was completed "it contained five tunnels, it was ninety-three miles long, had seventy-six locks, and passed over many aqueducts"; Brindley, however, did not live to execute the whole of the great work.

In an account which has been written of Mr. Brindley, it is said that the grandeur of his plans drew crowds of astonished and delighted visitors from all quarters to witness them. One who came to see him while the great tunnel was being formed, says:—

"Gentlemen come to view our eighth wonder of the world, the subterranean navigation, which is cutting by the great Mr. Brindley, who handles rocks as easily as you would plum-pies, and makes the four elements subservient to his will. Every mind is filled with wonder at the things he pronounces to be practicable. He has cut a rifle through bogs, which he binds up, embanking them with stones, which he gets out of the other parts of the navigation. On the side of the hill Yeldon, he has a pump, which is worked by water, and a stove, the fire of which sucks through a pipe the damps that would annoy the men who are cutting towards the centre of the hill. The clay he cuts out serves for brick to arch the subterraneous part, which we heartily wish to see finished to Welden Ferry, when we shall be able to send coals and stones to London, and to different parts of the globe."

Besides the great TRENT AND

98

MERSEY CANAL, many others were formed in different parts of the kingdom; and in most of the works Brindley assisted with enthusiasm. Thus, as long as he lived, he spent an active and useful life. He was indeed too active: he "multiplied his labours, wasted his strength, and shortened his life." He died in Staffordshire, in the 56th year of his age, on 27th September, 1832.

The life of Brindley was short, but it was always pleasant, because it was useful. While he lived, he had one of the pleasures which great men often feel—he saw others *learning from him*; he saw many trying to imitate him; he saw them succeed in doing greater things than they had ever dreamt could possibly be done.

Such a result of his labours will always be a great joy to a good man. Cannot you imagine that it was very pleasant for him sometimes to sit down and think? "Yes," he might say to himself, "I have done a great deed; I have shown the world an improvement."

But he might think again, and find more pleasure still. He might say to himself, "I see that my own plans will bring forth fruit a hundred-fold; for not only myself, but future generations, can thus be of service to their country."

And such has been the case. The people were aroused, and began to do even more than other nations had done. In about seventy years, nearly three thousand miles of canal

were made, which, before the invention of the steam-engine, were of the greatest service—increasing the wealth and importance of England.

Children! may you not be as useful as Thomas Brindley?

Would you not like to do some great good, and teach it to others? There are hundreds of ways of being useful even without inventing new plans. Say to yourself, "I will do so." Plan something good to do in your lifetime—and, do it!

"I CAN'T."

BY W. O. BOURNE.

Never say "I can't," my dear;
Never say it.
When such words as those I hear,
From the lips of boy or girl,
Oft they make me doubt and fear:
Never say it.
Boys and girls that nimbly play,
Never say it.
They can jump and run away,
Skip and toss and play their pranks;
Even dull ones, when they're gay,
Never say it.
Never mind how hard the task,
Never say it.
Find some one who knows and ask,
Till you have your lessons learned;
Never mind how hard the task,
Never say it.
Men who do the noblest deeds
Never say it.
He who lacks the strength he needs,
Tries his best and gets it soon,
And at last he will succeed—
Never say it.
But when the evil tempts to wrong,
Always say it.
In your virtue firm and strong,
Drive the tempter from your sight;
And when follies round you throng,
Ever say it.
When good actions call you near,
Never say it.
Drive away the rising fear,
Get your strength where good men do;
All your paths will then be clear.
Would you find a happy year?
Would you save a sorrowing tear?
Never say it.

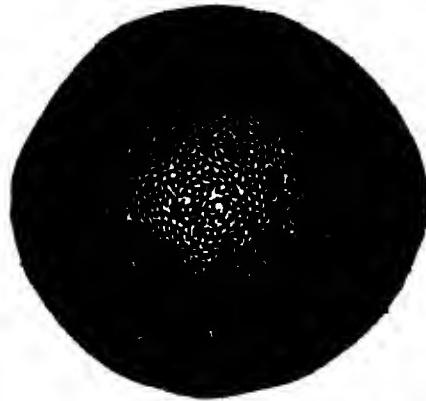
CHAPTER II.

THE PARTS OF A PLANT—THE STEM.

L. THAT is a nice cane you have in your hand, Willie! Are you going out riding?

W. No, I have been out to buy it for our lesson; it is the *stem of an endogen*—at least that is what papa calls it. What is an endogen, papa?

P. The word “endogen” means ‘growing from within, just as “exogen” means growing outside. Look at the end of the cane, Willie.



W. Certainly, it is not an exogen. You see neither pith, nor medullary rays, nor circular layers of wood.

Ion. No; it has not such a regular appearance as the exogen stem.

P. That is true; for it consists of bundles of fibres, arranged irregularly instead of in circles—the centre, instead of being hard, is soft.

L. And it has large holes in the centre; I suppose that they are the vessels for the sap to pass through.

P. The course of the sap in

this kind of stem is not so well known as that of the exogens. But you may know this, that the sap as it descends to form new wood does not descend by the bark; it descends through the vessels in the centre, and thus it is that the centre is always soft. Instead of settling in the centre and forming “heart-wood,” the sap hardens the outside part of the stem; it fills up all the pores, and it forms fibres which interlace together; thus the wood increases inside.

Ion. Then of course the outside part must stretch!

P. It does, to some extent. But it cannot stretch much, and it becomes very hard, even harder than the *heart-wood* of the exogen stems, especially in the lower part near the root. Some stems are hard enough to resist the blow of a hatchet.

L. And when the stem cannot stretch any more, does it get filled up with the new wood that is made every year?

P. Yes, that is the case; and when the trunk becomes thus solid, there are no spaces for the sap to pass up and down—therefore it dies. Sometimes Nature provides a remedy by splitting the hard outside of the stem. Men have tried the same experiment. A palm, which had begun to languish, was restored by splitting down the outside with a hatchet.

Ion. Then the *palm-tree* is an endogen, as well as the cane.

P. Yes; the palm family, the grasses, and corn-plants, are all exogens—bamboos, and all canes and reeds; the sugar-cane is another; the lily, the asparagus, the hyacinth, and the iris. The palms are the most important of the endogens, and are found in the tropics; indeed the endogens belong principally to the tropics, as I have before told you.

W. You told us, papa, that the endogens have no branches. I have never seen any branches on the plants you mentioned—on a hyacinth, a lily, an iris, or a corn-plant; they all grow up with a straight stalk, and have a bunch of flowers at the top.

P. They have no branches because of the hardness of their outside casing. New branches are produced by buds; but no buds could penetrate the sides of an exogen stem. The stems, however, have one bud at the top. From this proceeds the bunch of flowers you speak of; and in the palm-trees the splendid crown of leaves also grows from this bud.

We must not close our lesson on stems without noticing their many different forms.

You have, I dare say, seen *creeping stems* growing in different directions: some twine round other plants, working in the direction of a corkscrew, such as the scarlet-runner, convolvulus, bind-weed, passion-flower, and hop; the *runners* of strawberries are another form of stem; the *root-stock* of the fern and others is a stem which keeps close to the earth, sending down roots at short intervals.

There are also *underground stems* of the same description: the *couch-grass* is an instance; the *tubers* and *bulbs* which I spoke of in our lesson on roots are all parts of underground stems.

W. Now that you have finished your account, papa, we will make up our lesson and learn it.

Memory Lesson 2. THE PARTS OF A PLANT—THE STEM. •

1. *The stem of a plant is that part which grows upward, in the air, toward the light.*

2. *The principal functions of the stem are—1st, to elevate the leaves, flowers, and fruit, in a position where they may be easily influenced by the light, heat, and air; and, 2ndly, to convey the sap up and down between the root and the leaves.*

3. *There are two principal kinds of stems. Those which grow by adding to their outside are called EXOGENS; their principal parts are the pith, medullary sheath, medullary rays, circular layers of wood, sap, heart-wood, sap-wood, and bark; all of these have important functions.*

4. *There are other plants with stems growing from within—they are called ENDOGENS; their parts are less regular than those of the Exogens, and they have no side branches.*

5. *There are also CREEPING STEMS, and UNDERGROUND STEMS, such as the bind-weed, the strawberry-runner, root-stocks, the stem of couch-grass, &c.*

THE TUDORS.

HENRY VII. AND HENRY VIII.

P. BEFORE we write our lesson on Henry VII., let us have a peep into the social history of the nation, and record one or two events worth noticing. The feudal system was, as I said, dying away; therefore the domestic habits of the old barons are a subject of interest.

In the household book of the *Earl of Northumberland*, we find that the family rose at 6, dined at 10, supped at 4; and at 9 o'clock the castle-gates were all shut for the night. No one might go in or out after that time. The next morning mass was said at 6, so that all the servants must rise early.

The total number of the earl's family, including master and all servants, was 166; but on an average about 57 strangers were reckoned upon every day—thus making the total 223 persons. The whole annual expence for the household was £1,118 17s. 8d. The meat, drink, and firing cost nearly £800. For washing, I am sorry to say, that only 40s. per annum was allowed, and that was principally for the linen of the chapel. I wonder what the sanitary reformers of these days would have said to that family!

The family only ate fresh meat from Midsummer to Michaelmas, living on salt meat during the other six months. This, as I have before told you, was because the art of feeding cattle in the winter

with turnips, oil-cake, &c., was not known. Indeed the turnip was little cultivated in that period: during the times of war and trouble it had almost been forgotten. On "flesh days," half a chine of mutton, or a chine of beef, was boiled.

The commerce of England, which Henry promoted so much, was also interesting. The most important part of trade was transacted at *fairs*. Many lasted for a long time—that of *St. Giles Hill* at *WINCHESTER*, which you know was a most important city in former times, lasted sixteen days. The tents of the fair were laid out in regular streets, and looked like a busy city. It is said, "The king, the bishops, and great barons, sent their agents, or else went in person to this fair—where they would buy jewels, clothes, furniture, liquors, spices, cattle, coins, indeed almost anything—including men and women sometimes—for it is well known that slaves of both sexes were publicly sold in England about the end of the 14th century."* In the present day, a fair is still held at Winchester, on St. Giles Hill, every year. It is called the *Cheese fair*; immense piles of cheese may be seen there.

One important step taken by Henry to encourage foreign commerce, was to stop the practice of *impressment*. Ac-

* Wade's British History.

cording to this practice, whenever a king made war, instead of using his own ships, he used to seize all the merchants' ships and sailors that he could find, and form them into a fleet to fight his enemies, or transport his armies. This proceeding at once put a total stop to trade. Henry not only gave up this unjust practice, but he built ships of his own. He spent £14,000 in building one ship, called the *Great Harry*—which is considered the first ship of the English navy.

Another domestic incident of this reign was the establishment of the first *standing army*—an event much to be deplored, as “standing armies” will have to be abolished, if men are to act according to the commands of our Saviour. Fifty archers were at first instituted as a guard by King Henry, and their number was in time increased to 100; they were required to attend the king at home and abroad.

The first *shillings* were issued in the reign of Henry.

The *Chapel of Henry VII.*, at Westminster, was built by his order. It is a most magnificent specimen of “the florid” style of architecture which was introduced in his reign.

Another important event in Henry's reign was the discovery of America, by a native of Genoa named *Christopher Columbus*: this happened in 1492. *SEBASTIAN CABOT*, a native of England, who was the first European that landed upon North America; *AMERIGO VESPUCIUS*, a native of Flo-

rence, who gave the name to America; *BARTHOLOMEW DINZ*, a Spaniard, who first sailed as far as the Cape of Good Hope; and *VASCO DE GAMA*, a Portuguese, who first doubled the Cape (or sailed round it), are names worthy of mention in those times of enterprise and discovery. *WILLIAM CAXTON*, the printer, still lived in the reign of Henry VII.

Lesson 30. HENRY VII.

Began to reign . . . 1485.

Died 1509.

1. *Henry VII. began the line of Tudor kings. These kings were the descendants of OWEN TUDOR, the Welsh gentleman who married Catherine, the widow of Henry V.*

2. *When the line of Plantagenets ended, the civil wars, the feudal system, and the system of Popery began to decline. Henry VII. was a determined friend to peace and commerce; he only engaged in wars which he could not possibly avoid. The principal disturbances of his reign were those arising from conspiracies and rebellions. Those of Lambert Simnel and Perkin Warbeck were the most important.*

3. *Henry did very much during his reign to improve the condition of his kingdom. His great aim was to raise the people, and depress the nobles and the feudal system. This he accomplished most effectually by avoiding war, on which the existence of the feudal system much depended; and by the improvement of commerce, which provided employment for*

the people, and made them less dependent on the nobles. Henry also aimed a blow at the feudal system by a law which permitted the nobles to sell their estates, and to divide them at their deaths.

4. In order to carry out his plans, however, Henry tried to dispense with the help of the Parliament, and to govern by his own power. At one time the Parliament did not meet for seven years. Henry was enabled to govern without them, because he possessed sufficient money to be independent of their help. He was a very frugal, careful, and sagacious man, but, unfortunately, he resorted to most unjust means to increase his riches. He died in the year 1509, possessing at his death £1,800,000. He was a contrast to Henry VI., for, at the close of his reign, which was a long period of civil war, his debts were £372,000.

The establishment of the COURT OF STAR CHAMBER, the first issue of SHILLINGS, the beginning of the STANDING ARMY, the DISCOVERY OF AMERICA, by Christopher Columbus; and the names of Amerigo Vespuccius, Sebastian Cabot, Bartholemew Diez, and others of these times, are worthy of remembrance.

HENRY VIII.

P. There will be time for us to have a few words to-day on the history of Henry VIII. He was the son of Henry VII. His father had taken care of his education, as he thought, for he had rendered him accomplished and learned;

but, on the other hand, he had not taken care to improve his son's character, by correcting his bad passions. Such education which makes a man learned without teaching him to act rightly, is a foolish one, as the life of young Henry will prove. Unfortunately, Henry VII. did not set his son a good example.

When young Henry VIII. came to the throne, he was at first much admired. He was eighteen years of age, handsome, lively, and supposed to be amiable; while he also had a strong intellect. The people were glad to exchange the old king, who had extorted so much from them, for his lively son.

In the first year of his reign, Henry married Catherine of Arragon, the widow of his brother Arthur. In the next year (1510) he punished the two unjust lawyers, Epsom and Dudley; they were convicted, and executed on Tower Hill.

The other acts of Henry soon showed forth his bad qualities, proving him to be a sad contrast to his father. Instead of saving money, as his father had done, the young king devoted himself to pleasures and rejoicings. The money which his father had so carefully hoarded, Henry squandered away in masques, balls, and pageants, which were kept up without interruption for two years. Before the end of that time it was seen that the bad passions of the young Henry were often his master; and that, as he was unable to control them, they led him into acts of injustice and cruelty.

INDUSTRY.

THE VILLAGE BLACKSMITH.

UNDER a spreading chestnut-tree
The village smithy stands;
The smith, a mighty man is he,
With large and sinewy hands;
And the muscles of his brawny arms
Are strong as iron bands.
His hair is crisp, and black, and long,
His face is like the tan;
His brow is wet with honest sweat,
He earns whate'er he can,
And looks the whole world in the face,
For he owes not any man.
Week in, week out, from morn till night,
You can hear his bellows blow;
You can hear him swing his heavy sledge
With measured beat and slow,
Like a sexton ringing the village bell,
When the evening sun is low.
And children coming home from school
Look in at the open door;
They love to see the flaming forge,
And hear the bellows roar,
And catch the burning sparks that fly
Like chaff from a threshing-floor.
He goes on Sunday to the church,
And sits among his boys;
He hears the parson pray and preach,
He hears his daughter's voice
Singing in the village choir,
And it makes his heart rejoice
It sounds to him like her mother's voice
Singing in Paradise!
He needs must think of her once more,
How in the grave she lies;
And with his hard, rough hand he wipes
A tear out of his eyes.
Toiling,—rejoicing,—sorrowing,
Onward through life he goes;
Each morning sees some task begin,
Each evening sees it close;
Something attempted, something done,
Has earned a night's repose.
Thanks, thanks to thee, my worthy friend,
For the lesson thou hast taught!
Thus at the flaming forge of life
Our fortunes must be wrought;
Thus on its sounding anvil shaped
Each burning deed and thought!

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS—THE INTERJECTIONS—SUMMARY.

Lesson 10.

THE INTERJECTIONS.

P. THERE is one other class of words for you to discover. See if you can find some of them in the following sentences. You may know them in two ways—1st, you may tell that they do not belong to any of the previous classes; 2ndly, you will be able to observe that they are alike.

W. Then, thirdly, we are to say what it is that makes them alike—to make their "definition."

P. Yes; here are the sentences.

Oh! Mary, you have burnt your pinafore. For shame! Aha! what fun he is making! He went out in the dark, and, alas! he fell into the well. Well! I am surprised, for he was a prudent man. Pooh! what is the use of prudence in the dark? Eh! how can you ever call prudence useless? Hush, hush!

Jon. I see the new kind of words, papa—they are not pre-

positions, or conjunctions, or articles. They are different from the other classes. They are only *exclamations*—just the little words which people use when they cry out. Here is the list. Oh! For shame! Aha! Alas! Well! Pooh! Hush! What do you call these exclamations, papa?

P. They are called *Interjections*, from two Latin words which mean a throwing in. You may see that they are merely thrown into the sentence, for they might be taken out again without spoiling the sense. So you may easily distinguish this last class of words.

L. Yes. I will write their definition.

Definition — Exclamations thrown into a sentence to express joy, sorrow, anger, or any other feeling, are called **INTERJECTIONS**.

Examples — Such as, Pooh! Dear me! Tush! Heyday! Oh dear! Hark! Fie! Hollo! Alas! Alack! Hurrah!

No. 10. PARSING EXERCISE.

(First say what class each word in the following sentences belongs to; 2ndly, count all the words in the whole exercise; 3rdly, say how many words of each of the nine classes there are in all the sentences.)

Pity the sorrows of a poor blind man. Oh! give relief, and heaven [will bless] your store. The moon [is shining] brightly, yet the stars are invisible. His servants love him tenderly because he is a very kind master. Run quickly into the little garden and catch the old mare, for she [is trampling] on the beds. Oh! make haste, or she [will spoil] our beautiful flowers. Ah! look at my best carnation. Height! Lo! suddenly the ball fell down the

chimney ; it bounced on the floor, bounded through the window, and dropped into the area of our house. The sun [is setting] beautifully now, but soon the darkness [will be felt].

L. Secondly, we are to count the words in the exercise. I have counted them ; there are 105.

Jon. And Willie and I have counted the number of each class. There are 23 nouns, 8 adjectives, 10 pronouns, 19 verbs, 8 adverbs, 15 articles, 8 prepositions, 8 conjunctions, and 6 interjections.

P. That is correct. Now that you have counted them, you may write the words themselves in their proper classes. Write the 105 words on your slate, arranging them in classes.* When you have done this, you may learn your "memory lesson" on the nine classes.

ENGLISH GRAMMAR.

Memory Lesson 2.

ETYMOLOGY.

(THE NINE CLASSES OF WORDS.)

The different words of the English language may be arranged in nine classes (sometimes called "parts of speech").

1. All words that are the names of things are called **NOUNS**—such as, *cow, sorrow, haste, box*.

2. All that express the qualities of things—such as, *little, white, heavy, round*, are called **ADJECTIVES**.

3. There are words sometimes used instead of nouns—such as, *it, he, us, we, our, she, I*; these are called **PRONOUNS**.

* This exercise should of course be written by the young readers of PLEASANT PAGES.

4. There are words which express being something, doing something, or being done to—such as, "*was ill*," "*am good*," "*to kick*," "*will kick*," "*was kicked*," "*sing*," "*jump*," "*smile*"; these are called **VERBS**.

5. Words are sometimes added to verbs to tell us something about them—such as, *nicely, well, much, soon, here*; these are called **ADVERBS**.

6. The two little words *a* and *the* are sometimes placed before nouns to show whether they are used in a general or particular way; these are called **ARTICLES**.

7. There are many words used to show the connection between other words—such as, *of, for, to, by, through, under, before*; these are called **PREPOSITIONS**.

8. Some words are used to join two parts of a sentence together—such as, *and, but, yet, when, if, or, as, though*; and these are called **CONJUNCTIONS**.

9. All words used as exclamations—such as, *Fie! Ah! Oh! Haha! Pooh! Tush! Halloo!* are called **INTERJECTIONS**.

P. I think that you would remember the names of these classes better if I were to tell you what each name means.

The word **NOUN** is derived from the Latin *nomen*, a name.

ADJECTIVE is derived from two Latin words, *ad*, to, and *jactus*, thrown (being thrown on to nouns).

PRONOUN is derived from *pro*, for, and *nomen*, a name.

VERB is derived from *verbum*,

a word; for, as nouns and adjectives are often made from verbs, they were considered the principal words of a language.

ADVERB—if you notice the derivation of "Adjective," you may at once see how adverb is formed.

ARTICLE is derived from *Articulus*, a little joint, as these

little words resemble joints in a sentence.

PREPOSITION is derived from *pre*, before, and *positus*, placed.

CONJUNCTION is made from *con*, together, and *junctus*, joined.

INTERJECTION is derived from *inter*, between, and *jactus*, thrown.

THE REAPER AND THE FLOWERS.

THERE is a reaper whose name is Death,
And, with his sickle keen,
He reaps the bearded grain at a breath,
And the flowers that grow between.

"Shall I have naught that is fair?" saith he;
"Have naught but the bearded grain?
Though the breath of these flowers is sweet to me,
I will give them all back again."

He gazed at the flowers with tearful eyes,
He kissed their drooping leaves;
It was for the Lord of Paradise
He bound them in his sheaves.

"My Lord has need of these flowrets gay,"
The Reaper said, and smiled;
"Dear tokens of the earth are they,
Where he was once a child."

"They shall all bloom in fields of light,
Transplanted by my care,
And saints, upon their garments white,
These sacred blossoms wear."

And the mother gave, in tears and pain,
The flowers she most did love;
She knew she should find them all again
In the fields of light above.

Oh, not in cruelty, not in wrath,
The Reaper came that day;
'Twas an angel visited the green earth,
And took the flowers away.

LONGFELLOW.

THE FOREIGN TRAVELLER.

THE TURKS—RELIGION—HABITS—OPIUM-EATING, ETC.

"**M**Y DEAR CHILDREN,—

"Hear about the Turks!

"'THE TURKS,' said my companion, 'are a fine-looking race of people. They are descended from tribes which still inhabit the shores of the Caspian Sea. Perhaps their elegance of person is in consequence of the mixture of blood in their constitutions; for, just as the English are descended from the Ancient Britons, Romans, Saxons, Danes, and Normans, so you have Arab, Grecian, and Persian blood in the veins of the Turk. And thus a Turk is the handsomest of human beings; he has a lofty forehead, dark eyes, and finely cut features.'

"'So much for their appearance!' I said. 'But never mind their persons: what are their *characters*?'

"'They are very indolent, certainly; but if you oppress the Turks, or rob them, then they become infuriated. In general, they have little care or pity for the *infidels*, as they call those who are not Mahomedans; and yet they are often kind and generous to strangers. Their disposition is a strange compound of fierceness and generosity: they will dethrone and strangle their sultans without remorse, yet they will build hospitals, and endow them, and establish other charities.'

"'The character of the Turks, however, is much influenced by

their religion. Tell a Turk that his city is very dirty, he will answer you "God wills it." I once heard of some Turks who were sitting near a large mass of gunpowder, and were smoking: they were reminded that if only a spark from one of their pipes fell among the gunpowder, they would all be blown to atoms; but they would not remove; their only answer was, "That if God willed them to be burned, they would be; if not, they would be saved." Thus they take little care of themselves or their doings. The Turk believes that all that has, or ever will happen, even the most minute thing, has been decided by fate, or by the will of God, and (sometimes) he acts accordingly. We call such a doctrine "fatalism."

"'The Mahomedans are divided into two great sects, viz., the followers of *Ali*, and the followers of *Omar*. The Persians alone are of the sect of *Ali*; and the Turks and Arabs are the followers of *Omar*. These sects hate and despise each other. The Turks and Arabs call the followers of *Ali* *heretics*, while the Persians in their turn call the sect of *Omar* the followers of the devil; *Ali* they say is the lawful successor of the Prophet, and they call him "the Vicar of God."

"'The sect of *Omar* believe their *sultan* to be at the head of the Mussulman religion; he

is looked upon as the Prophet's successor. You know, no doubt, what is the principal article of their faith—"There is one God, and Mahomed is his prophet."

"Instead of ten commandments as the Jews had, the Mahomedans have five:—

"1. To pray five times a day.
"2. To observe the fast of the month of Ramazan.

"3. To give alms and do other deeds of charity.

"4. To perform a pilgrimage to Mecca (the Prophet's birthplace), once in the lifetime.

"5. To keep the body externally pure.

"Besides these, there are minor commandments. Every Mussulman is to fast on Friday most rigorously (this day is sacred because it is that on which Mahomet saved himself from his persecutors by flight)—to practise circumcision—to abstain from wine and fermented drinks—to abstain from pork, and the flesh of animals that have died from suffocation. The Turks attend to all these commands except that which relates to wine; and unfortunately their consciences allow them to break this law.

"The fast of Ramadhan (or Ramazan) is also sadly broken—or, at least, it is kept in a very bad way. It is enjoined in the *Koran* that once every year, during a whole month, the Mahomedan shall abstain perfectly from all meat and drink, from the hour of sunrise till sunset—he must not even let cold water touch his lips. After loitering away his time during the whole day, he makes

up for want of food and exercise at night. As soon as the sun has set, he abandons himself to gaiety and every kind of indulgence; the wealthy hold parties of pleasure all night, and are often very intemperate—until the morning comes; then they are obliged to be very sober again. The lower ranks of people are just as bad."

"Yes," I said, "I am aware of that." Then I told the countess of the night-scenes I witnessed while stopping at Tangiers, which you may remember I described to you.

"At the end of the season of Ramadhan," said the countess, "there is a time of the greatest jollity; and I often wonder how the Turks get their living, with so much gaiety and idleness. To me they scarcely seem to work, even at other times; they spend their hours in sauntering from café to café, and in playing at chess and draughts. Or perhaps the Turk will sit cross-legged on a carpet under the shadow of some tree; there he will spend, perhaps, the whole day, sipping coffee and smoking, or listening to a favorite tune. Ask him why he does not take exercise, and he will tell you that he accounts it ridiculous to walk!"

"I suppose," I said, "that the Turk drinks coffee to stimulate him, because he is not allowed to have strong drink?" "Yes," was the reply; "and he not only takes coffee, but when he wants a strong excitement, he indulges in opium, a vegetable substance which excites the mind to the most delight-

ful imaginations. Like other stimulants, however, it has dreadful effects; it sometimes brings on fits of the most frantic rage. This opium may often be procured at the coffee-houses; and this reminds me of a clergyman who once ventured to take a dose of opium, to try its effects.

"In one of his letters, he says:—

"Our guide took us to a row of coffee-rooms, the favourite resort of the Teriakis, or opium-eaters. The juice of the poppy (opium) is, I think, as harmless as any other source of excitement; and then it has this strong recommendation,—it never makes a man foolish; it never casts a man into a ditch, or under a table; it never deprives him of his wits or his legs. It makes him visionary, but his visions create no noise, no riots; he deals no blows, blackens no one's eyes, and frightens no one's peace. But here my friend was mistaken: it sometimes causes fury.

"It was curious to watch the immediate effects on those who came to these coffee-shops to procure their daily allowance. The change which spread through the countenance and limbs, was like the restoration of the dying to the happiness of life. You could hardly persuade yourself that the man who now moved before you with a light tread, and an eye kindling with rapture, was the same who had just approached you with a faltering, feeble step, scarcely able to sustain himself upon his cane. Before, every feature seemed settled in despair, so that hope seemed like a mockery.

"My imagination was so kindled by the sight of these men, and the perusal of a little book called the 'Opium-eater,' that I resolved to try its pleasing effects. So, send-

ing to an apothecary's shop, I procured two enormous doses of the precious drug. One was taken by my young companion, who was also interested in making the experiment,—the other by myself.

"My comrade began immediately to feel extremely particular about the stomach, and soon in a retching agony parted with all his opium. My portion stuck fast; and I shortly lapsed into a disturbed slumber, in which it appeared to me that I retained my consciousness entire, while visions passed before me which no language can convey, and no words represent. At one time I was soaring on the pinions of an angel, among the splendours of the highest heavens, beholding at a glance the beauty of their unveiled mysteries, and listening to harps and choral symphonies, over which, time, sorrow, and death have no power; and then my presumption was checked, my cleaving wings were melted away, and I fell down, till caught in the bosom of a thunder-cloud. From this I was again hurled upon the plunging verge of a cataract, that carried me down, frantic with horror, into the lowest depth of its howling gulf.

"Thence again I emerged. And then, with the swiftness of a spirit, I seemed to float around just between the circle of the blue heaven and the sea, discerning upon the ocean the innumerable ships skimming the wave with the lightness of the swallow, while without the circle I beheld, far down in the twilight and gloom of an immeasurable gulf, the wrecks of worn-out worlds.

"Still I floated on upon the frightful verge of the circle, till coming around near the north pole I saw its steadfast star fixed in death. Other planets were bending over it; and when they had sung its funeral hymn, they low-

ere it fate a grave so dark, so bottomless and still, that all the convulsions of nature could never disturb its sleep. Then I thought how the dismayed mariner would now roll his eyes in vain to find his undeviating star, when an iceberg with its mountain mass of frozen torrents came rolling on, and catching me in one of its dripping shelves, bore me through seas lashed by the hurricane, convulsed with the war of the whale and sword-fish, and where the serpent, struck by lightning, lay troughed between two waves like a huge pifte prostrate among the hills.

" Being benumbed by the stiffening ice, I fell from my tumbling iceberg, and descending through the sea, was carried by a wave quite within a little grotto, reared of coral and lined with pearls, where a mermaid was gently kindling a fire. Beneath the reviving rays I soon felt each frozen vein and limb slowly tingling back to life; when this daughter of the deep, raising her harp, struck one of those soft strains whose liquid flow melts into the heart like fragrant dew into the bosom of the folding rose.

" But scarce had the last note of this sweet minstrel died away, when a call, loud as the summoning trump of the archangel, sent its rending thunder through the hollow caverns of the astonished ocean, starting even death itself from his sleep. The sheeted dead went up from their watery graves to stand on the sea, while the earth, from precipice to plain, from shore to mountain's brow, was covered with the shrouded myriads that had left their couches of clay.

" The sun, with a changed, despairing aspect, disappeared, leaving a huge darkened chasm in the heaven. The moon spun round and round, and slowly receded from view, leaving another fear-

ful blank in the blue vault. The planets fell from their places, and were quenched as they sunk into the lifeless void beneath. Thick palpable darkness filled all space, save where the forked lightning, arrested in its course, still preserved its terrific form and brightness, and save the lingering light of some lofher star that contended with its doom. The powers of nature were still and motionless; the mariner heard his sails fall against the idle mast; the breaker ceased to lift its voice over the fatal reef, while the sea-bird, unable again to reach the wave, rested upon his immovable pinions; the curling wave lay half-broken on the shore; the torrent ceased to plunge from its steep; the war-horse kneeled down and died; the monarch in his capital, discrowned, stood pale and speechless; the peasant in the field called aloud on his forgotten God; while the imploring shrieks of nations went up like the last wail of a ruined world."

" Such was a part of my friend's present wonderful vision, which, after taking the opium, lasted two days and two nights. When he awoke from his strange dream, he was in a state of most dreadful exhaustion; he could neither stand nor sit, nor lie, nor keep in one position for a few seconds only; he suffered from thirst, fainting, and delirious weakness.

" But we are near home," added the countess. " I will finish my account of the Turks after dinner."

" Therefore, dear children, I can't write any more; I am going to dinner. So please excuse me.

" Your affectionate friend,
" UNCLE RICHARD."

PLEASANT PAGES

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

8th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO INVENTED THE SPINNING-FRAME.

P. Do you remember the machinery-room of the Great Exhibition, Ion?

Ion. Yes, what a lively place it was!

P. It was indeed "lively," and noisy too. And what a *varied* company of workers there was, too! There were mule spindles; throstle spindles; roving spindles; there were carding engines; drawing frames; slubbing and roving frames; patent self-acting mules, and others.

L. What others?

P. Oh, it would take such a long time to tell you a twentieth part of "the others." The great *looms* were remarkable objects in their way. There were power-looms for "light goods"; power-looms "for heavy and tweedled goods"; power-looms "for weaving naval canvas," for strong fustians, for plaids, and for silks; and all these members of the loom family had a likeness to each other, yet they had their peculiarities, and their differences.

Ion. Were there any others besides?

P. Yes! Oh, yes. There were winding and cleaning engines; spinning or twisting mills; doubling frames, and reeling

machines; and more varieties of machines than you can remember.

But they ought to be known and remembered, too, by all boys and girls. Most of them are used for spinning and weaving cotton, and the cotton manufacture is now the most important in England, or the whole world. In our country it employs ten hundred thousand hands, producing ten times tens of hundreds of thousands of pounds, thus being the greatest source of England's wealth. No wonder the manufacture is a source of wealth, for the men and machines connected with it are always at work—all day long, for ten, twelve, fourteen, and sometimes sixteen hours, they are picking, and picking; and cleaning, and cleaning; and scutching, scutching; willowing, willowing; carding, carding; drawing, drawing; roving, roving; spinning, spinning; warping, warping; beaming, beaming; winding, winding; weaving, weaving; and bleaching, and dying, and printing, and pressing, and glazing, and packing; and although the people *do* go to bed at night, they get up again the next morning; and, if you want to

know what they will then do, they'll go on again picking, cleaning, scutching, willowing, carding, drawing, roving, spinning, warping, beaming, winding, weaving, bleaching, dying, printing, pressing, glazing, folding, packing, selling, exporting, and receiving large sums of money for their industry. Again, then! no wonder that the cotton manufacture is the greatest source of England's wealth.

Well, how has all this come about?

We have to thank somebody that men can do such great things—of course. You know that we have to thank Mr. James Watt for the power that moved those Exhibition machines—for the great steam-engine who hid himself in his own private building, and never cared to show his face at all. But we have also to thank the men who invented the machines.

W. Certainly.

P. Then let us have a look at these men, and learn about them, and give them their tribute of praise.

To begin. RICHARD ARKWRIGHT is worthy to be talked about. The great machine-room of the Exhibition might have been very small but for Richard Arkwright.

He was born in 1732, and was the son of a very poor man. If you had asked him how many brothers and sisters he had, he would have told you "twelve," and that he was the youngest of thirteen children. His father had enough to do to buy bread and butter for so

many mouths, so he could afford little money to pay for their going to school. Whether Richard Arkwright ever went to school at all, no one knows. It is certain that he was not taught much, not only because his father could not afford it, but because he was one day to be a barber; for which profession, perhaps, much learning would not be required.

So Richard Arkwright grew up and became a barber. He shaved his fellow-men, and cut their hair, and made wigs for them, until he was nearly thirty years old.

W. Ha! ha!

P. Don't laugh! Why laugh at a man because he is a barber? Isn't a barber useful? In the year 1760, however, he gave up shaving, and commenced travelling as a dealer in hair. He went up and down the country, collected the hair, dressed it, and sold it to the wig-makers. And even in attending to this plain, straightforward business, he gave a sign which may account for his after greatness. It is said that the wig-makers always bought his goods readily, for they found that the hair he sold was better than that of his rivals in trade. Now, that sign is worth remembering! he tried to do little things well; and he who will give great attention to little things will afterwards become great in other things. Boys who learn their lessons, or write their copies in the best way, will do other things in the best way when they become men.

Arkwright was also known

amongst the barbers, because he possessed a secret method of dyeing hair. This must, no doubt, have increased his profits.

In time, we find him giving attention to mechanics. Like many more ingenious men he set his wits to work, trying to discover perpetual motion. One day, in the year 1767, he was in Warrington, a town of Lancashire, and was trying to find a man who could make him some wheels. He thus became acquainted with a clock-maker named Kay. Arkwright and Kay were soon more than

acquaintances, they held long conversations together; for Kay had some models of a new machine, which only one or two people had ever heard of or seen. This machine related to the spinning of cotton; it interested Arkwright very much, and he and Kay became close friends. They formed plans together; they determined to keep the invention of this machine a secret; that they would work together to make what they could of it; and would share the profits between them.

(Continued on page 129.)

FAITH.

BY R. S. ANDROSS.

A SWALLOW in the spring
Came to our granary, and 'neath the eaves
Essay'd to make her nest, and there did bring
Wet earth, and straw, and leaves.

Day after day she toil'd
With patient heart; but ere her work was crown'd,
Some sad unishap the tiny fabric spoil'd,
And dash'd it to the ground.

She found the ruin wrought:
Yet not cast down, forth from her place she flew,
And, with her mate, fresh earth and grasses brought,
And built her nest anew.

But scarcely had she placed
The last soft feather on its ample floor,
When wicked hands, or chance, again laid waste,
And wrought the ruin o'er.

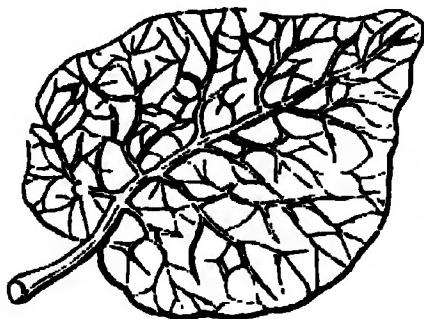
But still her heart she kept,
And toil'd again; and last night, hearing calls,
I look'd, and lo! three little swallows slept
Within the earth-made walls.

What truth is here, O man!
Hath hope been smitten in its earlier dawn?
Have clouds o'ercast thy purpose, trust, or plan?
Have FAITH, and struggle on!

CHAPTER IV.

THE PARTS OF A PLANT—THE LEAVES.

L. HERE is an old leaf, Willie. We are going to turn over an old leaf to-day.



P. Shall I begin by telling you how beautiful the leaves are? We need not say much about that—the thousands of leaves that form a light clothing for the branches of the trees, and hang down in fringy festoons—they are beautiful; the light, restless, waving, fluttering leaves, that forms strainers for the sun-light to pass through, and make network shadows to dance upon the ground—they are beautiful; the broad thick leaves which make solid solemn shadows over cool places, all these are beautiful.

L. And the shape of each leaf is beautiful, papa.

W. And the colour.

P. Yes; all these things are beautiful, although we perceive them without much trouble; but the hidden beauties which we will search for and find out are still more worthy to be admired. So let us make haste, and begin.

First, What is a leaf? Look

at the young bark of this twig. Peel it off.

L. I will. It is little more than a thin skin.

P. What is inside the skin?

W. Wood, of course.

P. Then the leaf may be said to be an extension of this thin skin into a broad flat surface, being supported by wood just as the skin of the stem is. Such is the leaf.

Let us next see what are its parts, and their uses.

L. I will notice one part. Each leaf has a stalk joining it to the branch of the tree.

W. And the next important part is the broad, flat substance of the leaf—what is that called, papa?

P. The name always given to the leaf-stalk is the *petiole*, and the expanded leaf is called the *blade*.

Ion. Then there is a great rib running down the middle of the leaf; it seems to be a continuation of the petiole.

P. It is; it is called the *mid-rib*, and the branches growing out from the mid-rib are called the *veins*.

Ada. Has the leaf a skin?

P. Yes. You may perceive this in any large leaf—in a cabbage leaf, for instance. You may tear off the skin, and you will then discover underneath a soft green flesh (or *tissue*), consisting of *round cells* packed together, with *cavities* between them.

W. That will make seven parts—the petiole, blade, mid-rib, veins, skin, tissue, and cavities.

P. And I must tell you that on the skin of the leaf there are thousands of *small holes*, just like the pores in your own skin. These little holes open into the *air-cavities between the cells*, which, as I have just said, you may find in the tissue. They are the leaf's breathing holes—they are not called *pores*, but *stomata* (meaning *mouths*).

W. The *stomata* form the eighth part we have noticed.

These *stomata* are much more numerous in the under than in the upper surface of the leaf; for in the upper surface the green cells are packed so closely together that there are scarcely any cavities between. Thus the *stomata* would be almost useless. You may now see why the upper side of a leaf is of a deeper green colour than the under side.

L. Yes; because it has more green cells under the skin.

P. The number of *stomata* on the under surface is very great. In some leaves there are nearly 100,000 to every square inch; in another, 70,000; in the vine there are 13,000; but on the *upper* surface of the vine-leaf they are entirely absent. The sorrel leaf has 20,000 *stomata* on every square inch of the under surface, and 11,000 on the upper. In the water-lily we find the case reversed; the *stomata* are found only on the upper side of its floating leaves. Again, in leaves that are upright, such as those

of the common garden flag, there is the same number of these breathing holes on both sides.

P. You have now observed eight parts in the leaf. Let us have a few words on their *functions*.

You know, of course, that for a small shoot to become a large tree, it must have plenty of *food*. It feeds heartily every day (except during its long *sleep* in the winter), and we do not notice this fact, because we do not see the process of feeding carried on. When an animal eats it takes in solid food, and its stomach reduces it to a fluid state.

L. And you said that the food must be fluid, or it could not spread through the animal's body, and become solid again.

P. True. Now, plants have not any such organ as the stomach, so they must receive their food in a *fluid* state. Thus the roots absorb fluid from the earth; but that is not sufficient, the fluid must be *prepared*. This is the office of the leaves—to prepare the sap of the plant, that it may form good sound wood.

Ion. Our lungs prepare our blood, and our stomach prepares food to make blood, which is to form good sound flesh; so the leaves are like the lungs and stomachs of the plant.

P. And the question is, how the leaves do it. The fish has organs, which render its blood fit for preserving life. These organs expose the blood to the little air that is found in the

water; they are called *gills*. The mammal exposes its blood to the air in organs called *lungs*; and in the same way, as you have heard before, the leaves expose the *sap* to the air.

You heard of the ascent of the sap from the root to the stem. Let us talk of its progress from the stem to the leaves.

Imagine the sap making its way up to the stem! The poor sap is thin and tasteless, for it is little more than water, with a very small portion of the earth's juices; but, as I said before, it is coming up to the leaves to have its qualities changed—to be made rich and nutritious. So it comes on, spreading through all the smaller branches and twigs. It passes from them through the petioles to the leaves. They are ready to receive it, and arranged so that the light of the sun may fall on every one. Beautiful leaves! Their parts are orderly and regular! They have two sets of organs on the upper surface, the mid-rib and network of veins, through which their sap must pass from the stem; and another set on the under surface, for the altered sap to return to the stem. The sap, therefore, enters on the upper surface. Let us see how it is acted upon.

The *light of the sun* is one of the important agents; its influence causes all the stomata (mouths) of the leaf to open. The sun's *heat* is another agent; it causes the greater part of the water in the sap to pass away, through the open stomata, in the form of vapour.

Ion. Just as the perspiration passes through the pores in my skin, I suppose.

P. Yes, in the same way. The *air* is the next important agent; it enters the leaves, and supplies the sap with some of its gases. The most important part of the air to the plant is that called *carbonic acid* gas, with which you are already acquainted.

Ion. I know that part of the air very well. You told us that our *breath* is carbonic acid. You said, that in our lungs the carbon from our impure blood unites with the oxygen from the pure air. The oxygen and carbon together form the breath which comes out of our mouths.

P. True; and just as the oxygen and carbon are united in your lungs, so they are separated again in the leaves (which I called the *tree's lungs*). The carbonic acid of the air enters the leaves, the carbon is then united with the sap, and the oxygen is set free again, to enter the lungs of more animals, and unite with more carbon.

L. That is very curious. We reject the carbon from our lungs, and the trees absorb it.

P. And when this carbon is united with the sap, it makes it thick and nutritious. The nutritious sap then passes through the vessels on the under-side of the leaf, through the petiole again, back to the body of the tree; there it forms material for the opening blossom, or for the ripening fruit and seeds, or for the growth of

new sap-wood, or for the formation of heart-wood.

You know how to prove that the carbon absorbed by the leaves forms material for the wood.

W. Yes; because coal, which was once wood, and charcoal (or burnt wood), are nearly all carbon.

P. Let us now make a summary of this lesson. We said that a plant cannot live without its root, because that organ procures the sap. Now, we know that it cannot live without leaves, because they perfect the sap.

You know, too, how much the leaves depend on the *light, heat, and air.*

W. Yes; now I see one reason why plants cannot grow in dark courts and alleys. As there is no light to act upon them, the leaves cannot open their mouths and breathe; and it is the same in the shady side of the garden—there is not light or heat enough for the plants, I suppose.

P. And there is a reason why plants will not grow even in London streets, and in other crowded cities, where there is light. It is because, from the quantity of smoke, and the number of inhabitants breathing the air, it contains too much carbon; then the stomata get choked up.

L. Unless you can get a very strong light and heat to open the pores more, and to make the plant live and breathe faster.

P. Not all plants require the

same degree of light and heat. You know, Willie, that we have in our green-house what are called *tender annuals*, which require very much heat and light.

P. There is one more point. I told you that in the broad leaves of the water-lily the stomata are on the upper surface—perhaps you can now tell me why.

Ion. Yes, because it would be no use to have stomata on the under side; the oxygen, which is separated from the carbon of the carbonic acid, would not easily pass through into the water, I suppose.

P. Right. I said that the upright leaves of the flags in our garden have the same number of stomata on both sides of their leaves—perhaps you can give me the reason for that also.

L. I think I can—because, as the light shines equally on both sides, the *green cells* of the tissue are as closely packed on one side as on the other—thus, there are the same number of spaces between them, for the pores. You may know that, because both sides are of the same colour.

P. True. You say that one side of a leaf is of a bright colour because the action of the light causes the number of green cells to increase. Perhaps you can tell me why celery and asparagus are so white.

W. I can. Because, when the gardener cultivates them he covers them over with earth; thus he keeps the light from them.

Ion. And that, I suppose, is the reason why, if you pull up the long stalk of mustard and cress, the part underneath the ground is white.

P. Yes. And you may remember that in our lesson on celery, I told you that the whitened (blanched) stalks are fit to eat because they have not the poisonous quality of wild celery. This is from the same cause that prevents their becoming green. From want of light and heat they are not strong enough to form the green sap which contains the poisonous quality. Will you have another question?

Ion. Yes, please—that is, if you think we can answer it.

P. Try! When you go to a forest you will find that the outside trees are finer than those inside. Again, if you examine one of those trees you will find that the outside leaves are of a brighter colour, and more numerous, and thus the branches are larger. If you cut the tree down and examine the trunk, you will find that the circles of wood are much thicker on the side most exposed to the light. Perhaps you can tell me why?

W. That is very easy to un-

derstand. The leaves on the outside of the tree have more light and heat than the others, therefore they digest more sap. Then the sap forms more wood on that side.

P. True; and for the same reason the outside trees of the forest are finer, and contain harder wood than the others.

One more word on the stomata of the leaves. If you twist a branch round, so that the lower surface of the leaves be turned towards the sun, they will gradually work back to their natural position. If prevented from doing this, they will wither and die.

L. That reminds me of my little geranium in the nursery window—its leaves did almost the same thing. Willie turned round the pot, so that the front of the leaves was turned towards the fire-place, and in a few days the leaves turned their front (or upper) side to the light again. If the plant could have spoken to Willie, it would have said, "You don't know how much my health depends on my leaves!"

Ion. And it might have added, "You don't know how much my leaves depend on the light and heat."

TO-DAY.

DON'T tell me of to-morrow;
Give me the man who'll say
That when a good deed's to be done,
Let's do the deed to-day!
We may command the present,
If we act and never wait;
But repentance is the phantom
Of the past, that comes too late!

THE TUDORS.

HENRY VIII.

P. You heard something of Henry last week. You heard that he had good abilities and learning, and might have become a good king, but for the want of good education. He had not been taught to govern his bad passions; he was accustomed to gratify every wish, therefore his passions governed him. He would not, and at last he *could* not be happy until his desires were fulfilled. Thus Henry spent the first two years of his reign in the indulgences of pleasure.

In the year 1511, Henry joined the kings of other nations in Europe in a league against France, and this was the first instance of England taking part in the disputes of other nations on the Continent. This event was the beginning of a bad course: the English Government, by meddling with the affairs of other nations, have since wasted immense treasures and the lives of thousands.

In the year 1512, war was declared against France. In the next year a sea-fight took place; a battle was also fought by land, which was called "the Battle of the Spurs." It was so called because as soon as the French came in sight of the English army they unaccountably turned round and *spurred* their horses to flight. The next year, however, peace was made. The French king, to please Henry, entertained

him in France; and the festival he gave him was so splendid that the place was afterwards called "the field of the cloth of gold." Both kings spent large sums of money on that occasion.

In the year 1513, a great battle was fought with the Scots on *Flodden Field*, in Northumberland. This was a most disastrous battle for Scotland. King James IV. was himself slain, with a number of nobles, abbots, and gentlemen; in all about 10,000 men.

The wars of Scotland and France being over, Henry devoted himself to pleasure again. But to pay for his indulgences he required a large amount of money. As he could not procure this lawfully, he oppressed his subjects, and acted unjustly in many ways to procure it. But the trouble of *forcing* his subjects to pay his unjust demands was too great; it interfered with his enjoyments. For instance, he attempted to raise taxes without the consent of the Parliament, and an almost general insurrection took place.

Such opposition was very "troublesome" to the king, who wanted to live at ease and enjoy himself. He therefore entrusted the business of procuring money to a man named THOMAS WOLSEY, who had lately grown into favour.

Wolsey was as remarkable a character in the reign of Henry VIII. as Thomas à

Becket was in the reign of Henry II. Let us look into his history.

Thomas Wolsey was born at Ipswich. So clever was he that he became "Bachelor of Arts" at the age of 14; and was called "the boy bachelor." In course of time he became a clergyman; by his pleasing manners he gained the favour of his patrons, and at last became chaplain to King Henry VII. Being employed on important business by the king, he executed it with such dispatch and success, that the king also was highly pleased with him, and made him DEAN of Lincoln.

When Wolsey was introduced to the young King Henry VIII., he saw at once how to please such a master. He did not disdain to dance, sing, laugh, and amuse himself with the worst people of Henry's court, until the king began to think him "a good fellow." He was made Bishop of Winchester; afterwards he became Archbishop of York; then he was made Lord Chancellor of England; and at length he received a Cardinal's cap.

As a cardinal, Wolsey acquired immense power, wealth, and influence; he was thus able to gratify his royal master's wishes, to procure him the supplies of money he required, and to enable him to indulge in almost unbounded extravagance.

The French and English kings became great friends, made great pageants, and indulged in games of "tilt and tourney," which were sustained with the most gorgeous magni-

fidence. Never were there such famous "games" as those carried on between Henry and Francis. Both were handsome young men, fond of "chivalry and feats of arms," and they sent a challenge through all the courts of Europe that they were ready, on the plains of Picardy, to answer all comers that were gentlemen at tilt and tourney. Thus they spent a whole fortnight in feats of arms and gay carousals.

While the king was thus enjoying himself, his industrious servant, Cardinal Wolsey, persevered in supplying him with money. He extorted it from the people by means of benevolences; he procured a large sum from the people, and another amount from the House of Commons.

Wolsey also took care of his own interests, by increasing his own riches and titles at the same time. In addition to the offices already mentioned, Wolsey had the bishoprics of York and Durham. He "farmed" the bishoprics of Bath, Worcester, and Hereford; and had the control of the richest offices of the church. Thus his own revenue was supposed to be as great as that of the Crown. He took care to live in splendour almost equal to that of Henry; he built for himself the magnificent palace of Hampton Court, and was waited upon by a train of servants and retainers, as if he were going to revive the feudal system in the church. He was indeed a great "church-baron."

But, bad as the king and his

cardinal were, there was one who beat them both in his desire for wealth; this was "His Holiness" the Pope. And he beat them both, too, in daring wickedness and injustice, and in the impudent lies which he invented to acquire riches. This so-called "Vicar of Christ" was thirsty for gold; so, in order to gain his desires, he almost offered to the people permission to sin. He issued what he called *indulgences*, which were to convey pardon to the most profligate of sinners, not only for what they were going to do. Some of these indulgences were also said to give to their possessor ETERNAL SALVATION—that is, if he would pay for them.

Such a shameless invention was too barefaced, and at length an honest monk, named MARTIN LUTHER, stood up to expose it. Being strong in Christ, he spoke out the truth. Knowing in whom he believed, Martin bearded the Pope, and called him by his proper name, which of course was not a pleasant one.

The boldness of Martin Luther gave courage to the thousands of others who had so long been disgusted by the wickedness of the priests. The Lollards, who, you know, began to serve God under Wickliffe a century before, now took heart again; and at last the world publicly dared to call in question the Pope's authority.

Such freedom of speech, however, was not only offensive to the Pope, but to the Cardinal and King of England. If men

were thus allowed to think for themselves, what would become of them also? Henry had not yet forgotten his learning; so he said that he would put down Martin Luther—he would make a book which should set the monk right again. He did so; and sent his production to Rome, for the perusal of the Pope. The Pope was delighted with the eloquence and learning of his "dear son" Henry, and gave him the title of DEFENDER OF THE FAITH. Henry was delighted, too, at being thus flattered. He showed yet more zeal against the Reformers; and burnt six men and a woman in Coventry for teaching their children the Lord's prayer and the ten commandments in their own language.

Thus did this trio, the POPE, the CARDINAL, and the KING, try to uphold the power of priesthood. Their great wealth and influence rendered them strong props to the rotten system of error.

Unfortunately, however, one of the props let go. The king falling away from his post, fell on the cardinal, carrying him away also. Thus, only the Pope being left as a support, the decayed old building fell down, and the days of the Church of Rome in England were numbered.

You shall hear next week how this happened; how the kingdom divided against itself could not stand; and how the most important event of the 16th century, the glorious REFORMATION, was begun in our country.

THE IDIOT.

THERE are tones to the midnight breezes given
For the ear of the mindless one ;
There are radiant forms in the summer heaven,
In the rays of the setting sun :
Ye see them not, but the Idiot's eyes
Have a farther—broader ken,
And a glorious world before him lies,
Unseen by his fellow-men.

There are wondrous things in the waters blue
Ye never may know or scan—
There are lovely things in each drop of dew,
For the gaze of the “child-like man :”
The flowers that laugh in the morning beam,
The stars in the midnight sky—
Oh ! little earth's wise ones know or dream
How they speak to his heart and eye.

The lightnings flash and the thunders roll,
And brave men shrink with dread ;
And ye mark the fear of the craven soul
In the cheek that hath lost its red :
But the Idiot smiles as the thunders crash,
And the storm-bolts round him fall ;
And he laughs in glee at each blinding flash,
And revels amidst it all.

The winds are whistling bleak and shrill,
The birds have left their spray ;
But the Idiot singeth as gaily still
As he sang through the summer's day :
The chilling breeze may pierce him through,
But he laughs in his childish glee,
And only says, with his lips all blue,
“ How fair is the bright snow—see ! ”

We may look in scorn on his vacant face,
We may turn in our pride away ;
Yet wish for as blithe a look to grace
Our careworn brows one day.
Our lamp may burn with a stronger flame,
But its light from our souls may sever ;
While the feeble spark in the Idiot's frame
Burns on—unquenched for ever.

Canada.

B. A. P.

ETYMOLOGY.

CHAPTER II.

THE NINE CLASSES OF WORDS—DERIVATION.

P. We have not quite done with our definitions of the classes. I want to try once more whether you understand them. Here is a verb—*to sing*. Do you know any noun that is made from that verb?

W. Yes, “singer” is. And from *to dance* we can make “dancer.”

Ion. And from *to brew* you make “brewer.”

P. Some part of a verb is also like an adjective, for you can use it to show the quality of nouns—such as, a *singing* boy; a *dancing* girl; a *brewing* utensil. These parts of a verb are called its *participles*, but in these cases they are used as adjectives. Indeed they are adjectives. Why?

W. Because they tell you something about each noun—that the boy has the quality of

being *able to sing*; the girl has the quality of being *able to dance*.

Ion. So we may make nouns and adjectives from verbs. I wonder whether we could alter the case, and make a verb from an adjective or a noun. I will try.

Street is an adjective. We may say “*to sweeten*.”

I will try a noun. *Salt*. You may make the verb “*to salt*” from it. From a plant you may make “*to plant*.”

P. You may make nouns and verbs also from adjectives. Thus, from *bright* you make “*a brightness*,” “*to brighten*.”

W. And from *red* you make the noun “*redness*,” and the verb “*to redden*.”

P. True; so you may have one more parsing exercise on the simple classes of words.

No. II. PARSING EXERCISE.

(Say to which class of words those printed in *italics* belong.)

I *lore* my *loving* brother, and he returns my *love*; he is a *lovely* boy.

The *warning* voice of my friend *warned* me to stop, but I paid no attention to his *warning*.

You must not eat *salt* with *salt* beef. I am going to *salt* some more tomorrow; here is our *salting-tub*.

This *warming*-pan will *warm* the bed. How *warm* it feels already! Give it a good *warming*. Be cool! You are talking *warmly* on the subject.

PART 2.

(Mention two nouns derived from each of the following verbs:—)

To run, to make, to jump, to feel, to dance, to kick, to fight, to grow.

(*Make an adjective from each of the following nouns :—*)

Wealth, beauty, man, gold, silver, lead, might, thief, rag.

(*Make two adjectives from each of the following nouns :—*)

Tear, sense, shame, fruit, mercy, faith.

(*Make a noun from each of the following adjectives :—*)

Wretched, red, black, heavy, strong, young, deep, high, broad, solid, transparent.

(*Make an adverb from each of the following adjectives :—*)

Quick, slow, warm, base, honourable, just, favourable.

The third part of your exercise to-day is one which you may frequently perform. I will make for you what has been called a "Parsing Scale." In this scale you may continually supply examples of the classes of which you have made the definitions.

Part 3. PARSING SCALE.

(*Supply three words of each class.*)

1. _____ is a NOUN, because it is the name of a thing.
2. _____ is an ADJECTIVE, because it expresses the quality of a thing.
3. _____ is a VERB, because it expresses doing something.
_____ is a VERB, because it expresses being or suffering something.
4. _____ is a PRONOUN, because it is used instead of a noun.
5. _____ is an ADVERB, because it is added to a verb to tell us something about the action.
6. _____ is an ARTICLE, because it points out whether a particular or general noun is spoken of.
7. _____ is a PREPOSITION, because it shows the relation between two words.
8. _____ is a CONJUNCTION, because it only connects two words, or two parts of a sentence.
9. _____ is an INTERJECTION, because it is an exclamation.

I SLEPT, and dreamed that life was Beauty ;
I woke, and found that life was Duty.
Was thy dream then a shadowy lie ?
Toil on, sad heart, courageously,
And thou shalt find thy life to be
A noonday light and truth to thee.

THE FOREIGN TRAVELLER.

THE TURKS.

"MY DEAR CHILDREN,—

"There is one remark concerning the opium-eaters which may be added to the account of last week. The Turks do not indulge in the bad habit of eating that drug so much as they did formerly. It is said that, in all classes, not more than two in every hundred make use of it.

"'If you are not tired,' said the countess, 'I can tell you a few particulars of the *general* habits of the Turks.'

"'Do!' I said; 'tell me just sufficient to make up another letter for the children.'

"Very well. It appears that the Turk differs from the Frank even in his most trifling habits. A traveller named Dr. Walsh once noticed this. He says:—

"The house next to the barber's shop was in progress of building. All the persons I saw engaged were working in a manner opposite to our usage. The barber pushed the razor from him—ours draws it to him; the carpenter drew the saw to him, for all the teeth were set in—ours pushes it from him, for all the teeth are set out; the mason sat while he laid the stones—ours always stands; the scribe wrote on his hand, and from right to left—ours always writes on a desk or table, and from left to right; but the most ridiculous difference existed in the manner of building the house. We begin at the bottom and finish at the top; this house was a frame of wood which the

Turks began at the top, and the upper rooms were finished and inhabited, while all below was like a lantern."

"Another peculiarity in the social habits of the Turks is the number of their wives. According to the Mahommedan religion each man is allowed four wives; but it is said that few young Turks have more than one. You have noticed, of course, that the faces of the Turkish ladies are not allowed to be seen, being always covered with a veil. The Sultan has numerous wives; the establishment of his wives is called a *Harem*.

"Smoking is, next to opium-eating, a peculiar habit of the Turk. His pipe is often a most expensive article, being made of very costly material. The length of the pipe denotes the dignity of the smoker; it is often six or seven feet long, and is carried about, by two servants, from place to place with great ceremony; the bowl is also supported on wheels, as an aid to indolence. In summer, the stem of the pipe is covered with cotton or muslin, and kept cool and moist with water."

"Such, dear children, was the account of the Turks given me by the countess. I have only one or two more words to add. The Turkish empire is ruled by a SULTAN. The Sultan is the 'successor of the Prophet,' and the head of the Mahom-

medan religion; thus there is no power to oppose him; he is perfectly absolute, and is only kept in check by fear of assassination.

"The highest officer of the state is not called the 'Prime Minister,' as in our country, but the *Grand Vizier*. The despotic governors of the provinces of Turkey are called *Pachas*. Unfortunately, they often suffer from the despotism of their master, and are put to death by the bow-string.

"Of the inhabitants of Turkey, the Turks are the smallest proportion; yet they are very proud, and, as I have told you, they treat the 'Franks' with scorn. You may thus imagine that the empire is not very strong. Turkey might easily fall a prey to some other country; and before now it would have done so, but for the interference of other nations. The Russians would like much to seize the empire of Turkey.

"I send you herewith my notes on Turkey, to commit to memory, and remain, dear children,

"Your affectionate friend,
"UNCLE RICHARD."

Notes—EUROPE.

TURKEY.

1. *Turkey in Europe is situated at its south-eastern extremity, and adjoins Asia.*

2. *The capital is Constantinople, situated on the Bosphorus, a narrow strait leading from the Sea of Marmora to the Black Sea. This city is very ancient; and from its situation might have become the capital of the world. Its ancient name was BYZANTIUM, but it was called CONSTANTINOPLE by Constantine the Great, who founded or rebuilt it A.D. 323.*

3. *Constantinople is built on a high triangle-shaped promontory, which has several hills. On the summit of these hills are mosques, towers, and other important buildings. The appearance of the city from the river, and the port of the Golden Horn, is therefore very beautiful, but its interior is a wretched contrast. It is known principally by its steep, narrow, dirty streets; and by the frequent occurrence of fires, and the plague. The ancient aqueducts, the Sultan's palace, and the numerous fountains, are the greatest attractions of the city.*

4. *The inhabitants of Constantinople are very varied. The Turks and Franks live in different quarters. The established religion is that of Mahomet. The religious and social habits of the Turks are very interesting. The Dervishes, the OPIUM-EATERS, the habit of smoking—the numerous wives—dress, &c., are almost peculiar to Mahomedan and Eastern countries.*

He prayeth best, who loveth best
All things, both great and small;
For the great God who loveth us,
He made and loveth all.

COLERIDGE.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

9th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO INVENTED THE SPINNING-FRAME.

It was in the year 1767 that Arkwright first knew the clock-maker Kay. I said that both men became very busy, for they had a new machine which had something to do with the spinning of cotton.

The cotton-manufacture in those days was very different from the cotton-manufacture now. Certainly, if you had asked a man then, "What is the name you give to cotton-cloth?" he would have answered, as people do now, "Calico"; and, if he had known anything about it, he would have told you why. He would have said, "All the best cotton-cloth of this country comes from INDIA. It is made at a place called *Calicut*; and that is why we call it calico. But we English cannot make cloth like the Indians; they have wonderful skill in spinning."

Suppose that you next asked the man how the English did make their cloth, he might have said, "Look at this piece of calico; you see it is made of threads which run lengthways and threads which run across."

Ion. Yes, I have noticed that myself—everybody has, I should think.

P. Then he might have con-

tinued, "These threads which run lengthways are called the *warp* of the cloth, and those which run across are called the *weft*;" and if he had told you the whole history of this warp and weft, you would not have wondered why the English people produced so little cotton-cloth.

L. Why was it, papa? Please tell us.

P. The truth was, that the people could not spin well enough or fast enough to make much cloth. Suppose that a manufacturer was going to make some calico. Instead of the weavers coming to a factory to make it, the manufacturers would give the cotton out to them, and they would take it to their own houses. The weaver could not make the long threads, or warp, of cotton; for neither he, nor his wife and children, could spin cotton fine enough. The warp was therefore made of the fibres of flax-stalk, or *linen*, and the weft was made of cotton threads which were spun by the family. The little children picked the seeds out of the cotton-wool, and cleaned it; the elder children carded it; while their mother, and perhaps the eldest daughters, would

sit down to their spinning-wheels, and spin it into threads. But, with all their industry, they could not spin enough west for the father. When weaving it into cloth, he could use up every day about as much as three first-rate spinsters could spin. Thus, the poor weaver was often in a great difficulty, for he was bound to make the cloth and return it to his master by a certain day, or he would have to pay a penalty. He would therefore set out on a visit to other houses, and would trudge three or four miles in a morning to collect "cross-threads," or west, from other spinners. Even then, poor fellow, he could not always get enough to keep his loom going, for he would often meet with other weavers who would pay the spinners more than the usual price, so that they might have their west.

When you think of these things, you can easily see how important was the invention which Arkwright and Kay were keeping secret. The machine, which was kept in Kay's house, was to be used instead of the slow spinning-wheels for making cotton-threads. This machine of theirs would not only keep a great many spindles at work at the same time, and thus spin more quickly, but it would make cotton which was much finer, and yet stronger; its threads were even strong enough to be used instead of linen, as warp for the cloth.

Arkwright and Kay thus had a most valuable invention, and they both knew it to be so.

They persuaded a Mr. Smalley, a painter and liquor merchant of Preston, to join them; and he procured for them a room in which to fix their new machine. This room was the parlour belonging to the schoolmaster of the free grammar school in Preston. Arkwright and Kay, however, did not do much business in that town, for they were both very poor men—they had spent much of their time, and all their money, in making the machine. So poor had Arkwright become, that, an election having taken place in the town of which he was an elector, his friends were obliged to buy him decent clothes before he could go out of doors to give his vote.

In these circumstances Arkwright found that it would be better to look out for some partners with more money. Perhaps he thought, too, that if he showed his machine to the cotton-spinners of Lancashire, they might treat him as they had treated another poor weaver a few years before. This man, whose name was Hargreaves, had invented a machine much like Arkwright's, which he called the *spinning-jenny*. The people of Blackburn, however, (the town in which he lived,) took affront at his machine, for they said that it would take the work out of their hands; therefore they broke into his house, destroyed his spinning-jenny, and forced him to leave the place.

So it is most likely that the remembrance of Hargreaves led Arkwright and Kay to leave

Preston before their machine was destroyed. They travelled southward to a manufacturing town called Nottingham. Here Arkwright showed his model to two large stocking-weavers, Messrs. Need and Strutt. These gentlemen entered into partnership with Arkwright, and supplied him with money to take out a *patent* for the machine, as its inventor.

Arkwright and his partners were not long in getting to work; a large machine was erected and worked by horse power, which was the first of the kind that had been worked with success in this country. Two years afterwards (in 1771), another mill was built in Derbyshire; this was moved by water instead of horses; it was therefore called the *water-frame*, and the cotton was named "*water-twist*".

When he had thus triumphed over the difficulties of poverty, and had felt the satisfaction of seeing beautiful cotton-cloth produced by his machine, Arkwright had more difficulties to go through. You must know that when a man has a *patent* for a new invention, it gives him the right to forbid any one else pursuing that invention; thus all the profit which it yields belongs to the inventor himself. Arkwright, however, soon met with the most determined opposition. Many other men started up, saying that he was not the only inventor, and that they also had a right to make such spinning-frames. Several actions at law were entered upon by Arkwright, and

these he lost; other nations and disputes were again begun, but they only ended by Arkwright losing his patent altogether.

Before long, opposition of all kinds beset the partners at Nottingham. The yarn which their machine produced was superior to any other; so the rival manufacturers were angry, and would not use it: they even combined together to prevent its sale. Thus Arkwright and his partners found that their speculation was not a profitable one; the machine produced vast quantities of yarn, but they could not sell it. The yarn lay upon their hands until they had a very large stock. But here you may see how men of perseverance succeed. Instead of giving up in despair, they determined that they would use their own yarn, and convert it into manufactured goods. They made it into stockings and calicoes, which were also very superior to anything that had been seen, and orders were sent to them for very large quantities.

Still their difficulties were not at an end; they were forced by the rules of the Government to pay taxes which were twice as heavy as those on other peoples' goods. Such taxes were certainly unjust; the partners, therefore, persevered against them, and in time an act of Parliament was passed reducing the tax on their goods one-half. Although such an act was only just, it was not obtained without most violent opposition from the manufacturers of Lancashire, amongst

whom Arkwright had formerly lived.

All these things, dear children, should lend you to think. They may teach you how very much a man has to go through before he obtains success in the world.

Like the great BRINDLEY, Arkwright had the greatest difficulties to encounter; and, like Brindley, he only became the more persevering. He had to fight with poverty, and enmity of all kinds, still he and his partners held on their course. Although they saw their money vanishing daily, although they saw hundreds after hundreds of pounds spent, until they became thousands; although, again, one thousand after another was spent; although for five years they did little else but *spend* money; yet they held on. They said to themselves, "We are *sure* that our machines are good ones; know that they deserve success; and we are quite as certain that they will have it; so the partners continued to work and spend without reward. They had faith in what they saw to be good. Thus they allowed more than twelve thousand pounds to be consumed, before their labours seemed likely to yield them a profit.

W. And what then, papa? were they not nearly ruined?

P. Perhaps. But at last they triumphed, as all who persevere in a good cause must do; and that is the lesson we

may learn from Richard Arkwright. He gave himself entirely to one object; like Watt and Brindley, he devoted his whole heart to whatever he was engaged in, even to the very smallest affair. Thus he struggled through the most hopeless circumstances until he overcame them. "From being a poor barber, he raised himself to be the founder of a new branch of industry."

Ion. And was he very rich at last?

P. Yes, very rich. When the tide of fortune turned in his favour, wealth flowed in abundantly; the partners enlarged their great establishment, and built new mills in other places.

Their riches were immense, and their honours were also very great. Richard Arkwright was made a knight by the king, and was then called by the title "Sir Richard."

Sir Richard must have been delighted to see what wonderful increase took place in the cotton manufacture. It is said that in 1787 there were only 42 small spinning-factories in England, and some of them were very insignificant. Now, the spindles which are in motion, spinning all day long, may be numbered by millions; the yarn they spin is measured, not by yards, but by hundreds of miles; and the old slow cotton-manufacture of England is become one of the wonders of the world.

CHAPTER II.

THE PARTS OF A PLANT—THE LEAVES (*Continued*).

W. PLEASE to let me recapitulate.

We have learned the *distinctions* of a plant. After considering a whole plant, we next considered its organs. We learned of the root and its parts; of the stem and its parts; and of the leaves and their parts.

Iou. And papa said something of the *functions* of each organ. The root has to suck up fluids; the stem to convey them; and the leaves have to prepare the fluids. We heard how they breathed forth one gas and absorbed another, and thus rendered the sap thick and nutritious.

P. And we noticed that this change of the watery fluid into nutritious sap (which forms wood, &c.), is like the *DIGESTION* of our food into blood (which forms flesh, &c.). The breathing process which causes this digestion is also performed by the roots of plants. It is very important that this should be known. Several years ago, ignorance of this circumstance caused much fine timber to be destroyed. Some alterations were being made in Hyde Park; and in a part where some fine elm-trees grew a considerable depth of soil was added. This soil, instead of improving the trees, caused them to languish and die; for the roots of the tree, which had grown near to the earth

for the purpose of breathing, could not exercise this function through the depth of new earth laid over them.*

P. But we were talking of the *leaves*. You heard last week of their organs and functions. I also told you that the action of the light upon them enured their green colour. In the book from which I read of the trees in Hyde Park, a remarkable instance is given of the action of the light upon the young trees, as they emerge from the buds. It is said:—

“It frequently happens in America that clouds and rain darken the atmosphere for several days together; and that during this time the buds of entire forests expand themselves into leaves. These leaves have a pallid hue until the sun appears; when, after a clear sky and sunshine for six hours only, their colour is changed into a beautiful green.”

A forest is also mentioned on which the sun had not shone for twenty days.

“The leaves during this period had reached their full size, but were *almost white*. One forenoon the sun began to shine in full brightness; the colour of the forest absolutely changed so fast that we could see its progress. By the middle of the afternoon the whole of this extensive forest, many miles in length, presented its usual summer dress.”

* Carpenter's Vegetable Physiology.

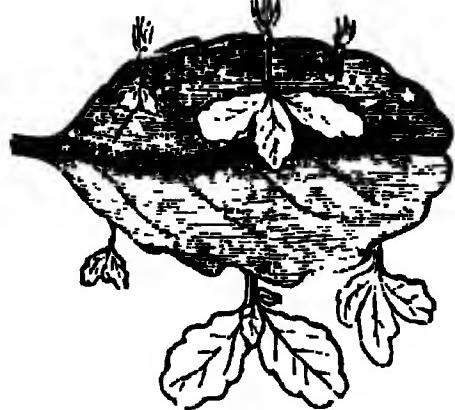
I think I have told you why the root of a plant is white, while its stalk is green; and why the stalks of the asparagus are white.

Ion. Yes; this happens because the root and asparaguss-stalk do not receive the sun's light.

P. To-day we will notice, 1st, one or two of the *extraordinary* functions of the leaves; 2ndly, the *situation* of the leaves on their stem; 3rdly, the *difference, size, and forms* of leaves; and, 4thly, the *appendages* of leaves; thus we shall have a good long lesson.

L. I am afraid we shall not have time for all that.

P. So am I; but to begin. In Dr. Carpenter's Book of Botany he tells us that some leaves have the function of *forming buds at their edges*. This may be seen in the *Bog Orchis*, a small plant found in the English marshes. Another instance of this is seen in one of the tropical plants, a picture of which I have copied for you.



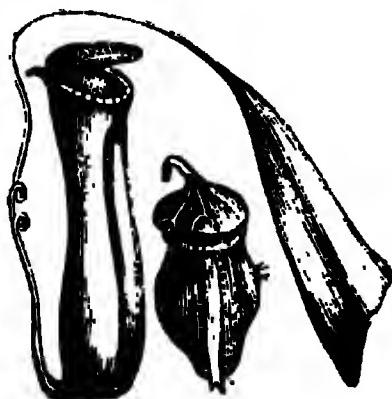
Air Plant.

It is called the *air-plant*—sometimes the *leaf-plant*, because a

single leaf is able to maintain life and grow, and flower without either stem or roots. The leaf may be hung up in a warm damp atmosphere, and the little plants may be seen growing upon it, and spreading their roots into the air for nourishment.

W. Well, I think that that is rather wonderful—to live entirely on air—without any help from the earth.

P. Some leaves have another singular function. I call them *grateful leaves*; for, just as the root has supported them, so they support the root. Their function is to *collect water from the atmosphere*, and convey it to the roots. The most remarkable are those called *Pitcher-plants*, the leaves of which grow in the shape of pitchers. Here is the picture of two which is given in Dr. Carpenter's famous book.



Pitcher Plants

One of these pitcher-shaped leaves seems to do more than to supply water. Its interior is covered with long bristly hairs, which point downwards; and at the bottom of the pitcher there is a sweet honey-like

substance, which is very attractive to small insects. The insects, therefore, discard the pitcher, which is a very easy thing to do, as the hairs all point downwards; but when they have feasted, if they wish to return, the case is quite different. Directly they try to ascend they are checked by the bristling points of the hairs, and are caught like a rat in a trap.

L. Poor things! Then they are obliged to stop there in the dark.

W. And live upon honey.

P. And die there also. This plant is like another, which is well known in the country; it is called the *Venus's Fly-trap*. Both plants have the remarkable function of *supplying animal food to the root*.

L. Well! That is more wonderful than supplying the root with water. I always thought that the animals lived upon vegetables; I never before heard of a vegetable requiring animal food.

P. These plants do, as you say, *require animal food*; the decayed bodies of the unfortunate insects they catch form a sort of manure, which is really

necessary to their prosperity. Plants of this kind have been placed in hot-houses, where there were no insects, but they soon began to languish. They were, however, restored by placing some little bits of meat on their traps; the meat when dissolved answered the same purpose as the insects.

There are several other leaves with peculiar functions. We must not forget those of the *Sesuvium Plant*, which you have, no doubt, heard of.

L. Yes; if you touch the leaves they instantly curl up, and cause other leaves which they touch to do likewise. Why do they do so?

P. The reason of their doing so has been discovered, but to explain it to you would require a close examination of the parts. Their action and that of the *fly-trap*, which closes suddenly upon the insect, are, I believe, caused in a similar way. I think, however, that we have had enough "lesson" for to-day.

W. But, papa, you were going to tell us of *four* subjects.

P. Yes; but I am very tired, so we will leave off until next week.

WISHING.

If wishes were efforts, most men would be great,
For most are desirous of wealth and estate;
But as they only prosper that choose to work hard,
The indolent wishers have little reward.

If wishes were efforts, we all should be wise,
For the ignorant simpleton all men despise;
But who can be clever by wishing alone?
We must study for knowledge, or else can have none.

THE TUDORS.

HENRY VIII.

P. I TOLD you that the Pope, the king, and Cardinal Wolsey, upheld the Roman Catholic faith in England, and that Henry was styled THE DEFENDER OF THE FAITH by the Pope.

But a terrible quarrel took place between these three powerful men. Henry was married to Catherine of Arragon, a relation of the Emperor of Germany. She had been a very good wife to him for eighteen years, when Henry took notice of one of her maids of honour, named Anne Boleyn. At length, he loved this woman so much, that he wanted her to be his wife instead of Catherine. But he could not put away his old wife without some excuse, so he said that as Catherine had once been the wife of his brother, his marriage with her was unlawful. He therefore told the Pope that he wished the marriage to be dissolved, and asked to have a divorce, by which he meant permission to separate from her.

The Pope, however, did not like to do this. He knew that it would be wicked to separate Henry's queen from him, or for Henry to have a new wife during Catherine's life time. Besides, the Pope knew that the queen was a relation of the Emperor of Germany. He knew, too, that the emperor would be offended at such a step, and he was therefore in a great difficulty. He hardly

dared to refuse the king's request, yet he was afraid of the emperor; so he made all kinds of excuses. He sent over a messenger to make inquiries about the marriage, and he kept the king waiting for an answer five years.

When trying to persuade the Pope, Henry expected Wolsey to help him. But Wolsey, too, was in a difficulty. He knew that his master was doing wrong, yet he wanted to please him, and the emperor, and the Pope also; so he wished to say as little as possible on the question. This conduct displeased the king exceedingly.

At last, when Henry's patience was nearly exhausted, and he wanted very much to marry Anne Boleyn, he was helped out of his difficulty by a young clergyman named Thomas Cromer. Cromer said that he ought to waste no more time arguing with the Pope; but to send to all the universities of Europe, and to ask them the plain question, "Can a man marry his wife's sister?" The king, delighted at the hint, exclaimed, "The man has got the right sow by the ear," and adopted the plan. He sent to all the universities; and by bribery he obtained from them votes in his favour. He also received Cromer into favour, who continued his friend during the rest of his reign. With the votes from

the universities, and the help of Craumer, Henry dared to carry out his wishes without the opinion of the Pope,—he put away his wife Catherine, and privately married Anne Boleyn.

When Anne Boleyn became queen, *Catherine* retired into private life; so, when Henry made Craumer his friend, he cast off *Wolsey*. Before his marriage with Anne Boleyn, he forgot all Wolsey's services, disgraced him, and arrested him for high treason. The poor disappointed Wolsey could not bear such treatment; on his way to London to be tried, he was taken ill, and died. In his last words he spoke well of his master, but his conscience told him that his service to the king had been a wicked one. "Ihd I bnt served Gon," he cried, "as diligently as I have served the king. He would not have given me over in my grey hairs."

Henry had now got rid of Wolsey, and he next cast off the Pope. When the Pope heard of his marriage, he pronounced sentence that Catherine was his only lawful wife, and that he must take her back again, or be punished. So Henry had to give up either his wife Anne, or his friend the Pope; and he chose the latter course.

In separating from the Pope, Henry found that he must also separate himself and his country from the Church, of which he had been styled "the defender." I told you how the eyes of the people had been gradually

opening to the truth; and, how many had lost their respect for the Pope. Thus Henry found many of the nation ready to carry out his views. In 1534, before the Pope's sentence had reached England, or was known, the English Parliament met, and threw off all subjection to the power of Rome. They abolished the Pope's power in England; they said that the king only had the right to appoint all bishops; they declared that it was illegal to appeal to the Pope; they forbade any more *tribute*, or any kind of payment to be sent to Rome, and said that all such money was in future to be paid to the king. In addition, they declared Henry to be "**THE HEAD OF THE CHURCH**," instead of the Pope. The nation were required to take a new oath of obedience to the king, called the *oath of supremacy*, which nearly all did with joy. Thus was the Church of England separated from the Church of Rome.

It was soon found, however, that the new *head* which had been put on the Church did not quite suit the body. There were two reasons for this—first, **HENRY, the head,** was altogether whimsical and cruel, while the *body* (consisting of ignorant monks and clergy) was in a terrible state of corruption.

To tell you of Henry's whims and tyranny would take a long time. Although he was the Pope's enemy he was no friend to the reformer Martin Luther, so he began to show his power by punishing most severely

both the Reformers and the Catholics. The Reformers were punished because they did not believe exactly as he did, which was often a hard thing to do, for he did not quite know what he believed himself. He declared that he would always be "orthodox," and would believe in "*transubstantiation*"—if you know what that means. The question of *purgatory*, however, puzzled him; he did not quite know what to say to that, so he allowed some people to believe in it, and some not. In every other point, however, they were to believe exactly as the king did; but as there were many who could not, the head of the Church burned them, and tortured them, and treated them with most horrible cruelty.

The Catholics came in for even a larger share of punishment from their new master. Many of them could not help believing in the Pope's supremacy still, and could not therefore persuade themselves to take the "oath of supremacy" to Henry. There was a good man, named Sir Thomas More, who was Lord Chancellor of England; he was one of the most accomplished, and learned, and witty men in England, and had been an honest and good servant to Henry. But his conscience told him that it was not right to acknowledge Anne Boleyn as queen, or Henry as the head of the Church; so he could not take the oath of supremacy. The savage Henry therefore behaved his old and

faithful servant, together with an aged bishop named Fisher. Many more were put to death, Catholics, Lollards, Lutherans, and Anabaptists.

When the news reached Rome that Henry had separated himself from the Roman Catholic Church, that the Pope was to be deprived of his tribute, and was not acknowledged in England the Pope and the Cardinals were, as you may imagine, very indignant. But, when they heard of the death of the Bishop Fisher, whom the Pope had made a cardinal, and of the death of Sir Thomas More, and of the other good Catholics who were hanged, the anger of the Pope was intensely hot. The king and all his followers were summoned to appear in Rome within twenty days, in order to answer for their crimes. The Pope declared that if they failed to appear they were to be excommunicated; the kingdom was to be put under an interdict; all friendship of Catholic princes with the king was to be dissolved; it was declared lawful to seize Henry, or any of his subjects, and to make them prisoners; to take their goods—in fact, all kinds of dreadful punishment were to be inflicted upon them. All over Italy and Catholic Europe Henry was called by the most violent names. He was said to be a monster, and was compared to the ancient Roman tyrants Nero, Domitian, and Caligula.

THE ENGLISH TRAVELLER.

LONDON—THE ANCIENT BUILDINGS.

"MY DEAR CHILDREN,—

"The third day was fixed for visiting the ancient buildings of London. At an early hour, therefore, we found ourselves on a large open space, called 'Tower Hill.' That is the most striking part of the Tower," I said to my friend—

"that old square tower with a turret at each corner; it is built of whitish grey stone."

"And is, perhaps, the most

celebrated part; it is called

"The White Tower," and is

said to be the work of William

the Conqueror."

"Who founded the Tower?" I asked.

"Well! that is a difficult question. It is known that it

originated with the Romans;

but William the Conqueror

laid the principal foundations,

so that he might have a strong

place to live in, and maintain

his authority over the con-

quered citizens of London."

"But I always thought that

the Tower was a *prison*, not a

palace!"

"So it has been, as you will

hear soon. But you must know

that in the ancient times, when

Normans and Saxons were dis-

tinct races, and when a king

seldom obtained the crown or

kept it without using the sword,

it was not quite safe to live in

such a residence as Buckingham

Palace."

"No: I never thought of

that."

"Therefore, when I tell you its history, you will hear of the Court being held here during many reigns. But it is too early for us to gain admission just yet, so we will sit down on this seat and have some talk about the old place."

"After the death of WILLIAM I., the Tower was⁹ the residence of his son, WILLIAM REX. It is said that in his reign it was "sore shaken by the injury of the heavens, and the violence of tempests;" therefore, William "pill'd the people pitifully to spend the treasure about the Tower." In the reign of his successor, HENRY I., the improvements were completed.

"STEPHEN, the next king, was an usurper, and as the Tower was fortified, the governor held out against him, but without success.

"In the reign of HENRY II., the Tower was much improved by the celebrated Thomas à Becket.

"The building was also improved in the time of the next king, RICHARD I. You remember, I dare say, how his brother John tried to gain the crown during his absence on the Crusades, but Richard's friend, Longchamp, Bishop of Ely, made ready to resist the attempt. It is said that "he enclosed the Tower of London with an outward wall of stone, embattled; and also caused a

deep ditch to be cast about the same, and thought to have surrounded it with the Thames.' Longchamp, however, was driven out of the Tower, and he fled the country.

"In the reign of JOHN you know that there was a great struggle between him and the barons, which ended in his signing the *Magna Charta*. The barons besieged the Tower, but did not get possession until the *Magna Charta* was signed, when it was given up by the king to the Archbishop of Canterbury as a security that he would keep his word.

"The weak HENRY III. strengthened and beautified the Tower very much, for he made it his chief residence.

"EDWARD I. is said to have made the last addition to the Tower; he increased the fortifications, and enlarged the moat; it was during his time that the Tower began to be famous as a prison. Here—but, what is that?"

"That is ten o'clock striking."

"Oh! then we can get admission now. Let us go down to the entrance."

"As we approached the building we had a better view of its different parts, which my friend described to me. The whole space of the building inside the walls is twelve acres.

"There is one part,' I said, 'which looks more modern than the rest.'

"That is in consequence of the great fire which happened

in the Tower in the year 1841. The grand storehouse, or *small armoury*, was burned down. This part is so called because it contained the smaller kind of fire-arms: almost 12,000 pistols, 11,000 muskets, and 26,000 bayonets, and a vast number of other articles, were destroyed.'

"On entering the gate of the Tower we paid the admission fee of 6d. each, at the Armoury Ticket Office.

"We then went into the ante-room of the Armoury, and waited until a warden came to conduct us through the building. 'These are fine gates,' said my friend; 'we entered at the place where the Lyons' (or Lions') gate formerly stood.'

"Why was it called 'Lyons' gate?"

"Because it adjoined the court where the lions and other ferocious beasts were kept. The menagerie in the Tower was begun by Henry III., who, you may read in history, had some wild animals presented to him."

"You said that Henry strengthened and beautified the Tower, and made it his chief residence."

"The menagerie was kept up through succeeding reigns, until a few years ago, when it was transferred to the Zoological Gardens; but here comes the warden."

"Who 'the warden' was, and what he did, you shall hear in the next letter of

"Your affectionate friend,
"HENRY YOUNG."

ETYMOLOGY.

CHAPTER III.

INFLECTIONS OF THE PARTS OF SPEECH—NOUNS AND PRONOUNS.

*L*esson 12.

THE GENDER OF NOUNS
AND PRONOUNS.

W. I am glad we are going to begin a new chapter; but what is meant by inflections, papa? and by "parts of speech"?

P. When we speak of an inflection of a word, we mean a change made in it, to show that its meaning is altered. By "parts of speech" I only mean the various classes of words which we have learned: they are so called because they are "parts" of the language we speak.

To begin. You know that mankind, and all animals, are of two sexes—male and female. Thus, tiger is the name of a male animal.

L. And tigress is female.

P. But in grammar, instead of using the words male and female, we say *mascu-line* and *femini-line*. Instead of the word sex, we say gender. Thus, what do we say in grammar, instead of saying that a tiger is of the male sex?

W. That it is of the *mascu-line gender*, I should think.

P. And what would you say of the word "tigress"?

L. That it is of the *femini-line gender*.

P. And what would you say of the word "table"?

W. Let me think. It has not any gender, certainly. It is neither a man nor an animal; I should say that it is *neither* gender.

P. That would be quite correct also. But in grammar, instead of saying *neither*, we say *neuter*, for the word *neuter* means *neither of two*. Now, answer my question—Which of the two genders is the word "table"?

Ion. Neuter gender, because it is neither of the two.

P. And what is the gender of the word "child"?

Ion. "Child" is masculine, for I am a child.

Ada. No; "child" is feminine, for I am a child.

W. Or child may be either gender—that is the proper thing to say. Do you say "either" in grammar, papa?

P. No. When a noun may be either gender, we say that it is *common*. Thus, as the word child belongs to both the masculine and the feminine genders, we say that it is of the common gender.

Ion. Then it is very easy to remember the genders—we only change the words in grammar.

For male sex, we say *mascu-line* gender.

For female sex, *femini-line* gender.

For neither sex, *neuter* gender.

For either sex, *common* gender.

L. I will give an example of each.

Nouns of the Masculine Gender—Boy, lord, king, negro, uncle, brother, bull, gander, ram, tom-cat.

Nouns of the Feminine Gender—Mare, hen, aunt, duchess, queen, cow, limness, tigress.

Nouns of the Neuter Gender—Book, bay, corkscrew, lamp, table-cloth, shovel, fire, bouldstones.

Nouns of Common Gender—Child, cousin, friend, relation, person, people, crowd, animal, bird, poultry, cattle.

P. You now know how to express the genders of nouns; so it is very easy to say the genders of pronouns, for you use them every day. They are *I, thou, he, she, it, me, him, her, we, you, our, your, they, &c.*

In the following parsing exercise you will find several pronouns, you may say the gender of each pronoun as well as each noun that you meet with in reading.

No. 12. PARSING EXERCISE.

Look at me, John! I think that he hears, but he [will not come]. Our duck [would make] a good meal, but we [do not like] to kill her. Bring the chickens, and look amongst them for a fat young cork, and kill him. You may put the mug on the table; it [will stand] steadily. Mamimu, this is not your blue mug, nor theirs, nor his, nor does it belong to me; it belongs to the cook. James gave it to her.

Lesson 13.

THE NUMBER OF NOUNS AND PRONOUNS.

P. When you say “*a single pin*,” Ion, how many pins do you speak of?

Ion. I only speak of *one*. The word *single* means *one* of anything.

P. So in grammar. When a noun signifies only *one* thing, we say that it is in the *singular* number. The word *book* stands for only one of the things called books; so we say that it is singular. The words *lamp*, *bottle*, *plate*, *boy*, *Willie*, *Ion*, and *Lucy*, are all of the singular number.

W. But the word *books* stands for more than one; what do we say of that?

P. We say that it is of the *plural* number. Will you change

those I have given you from the singular to the plural number?

Ion. I will. Lamps, bottles, plates, boys, Willies, Ions:—I don’t think that is right; it is so curious to say “Willies.”

P. There may be two Willies in one room; but the word sounds oddly to you in the plural number, because *Willie* is not so general a name as *boy*.

Ion. No, it does not belong to half so many persons—it is not so common.

L. And *Lucy* is a particular name—it is not so common as *girl*.

P. And *London* is a particular name—it is not so common as *city*.

W. And *France* is a particular name—it is not so common as *country*.

P. From this you may learn something. Those nouns which are *very general*, and form a large class, are called common nouns; but those names which belong only to *one* in a class, or to a *few* in a class, are called *proper nouns*. Proper means particular.

L. I can understand that. The word *dog* only belongs to a tribe in the class mammals. Is the word *dog* a proper name?

P. No, the word *dog* is not *particular* enough; it belongs to a great many animals, instead of belonging to one or two in particular. When you speak of one of a large tribe, or of one of a large *class*, such a noun is generally common. But our dog *has* her proper name.

Ion. To be sure; she is called *Fan*. "Fan" is her proper name, and "dog" is her common name; just as it is with me--I have the names *Ion*, and *boy*; one is proper and the other common.

W. You have more than one common name, Ion; you have several. Some are more common than others. Shall I say them all to you?

Ion. Yes.

W. I will say them one after another; you will see that each is more common than the one before it. Ion, boy, child, person, animal, living thing, object.

Now, you think about that! *Object* is a very common noun, for it not only belongs to Ion, but to stones, and clouds, which are not living things. *Living thing* is more common than *animal*, because it not only belongs to Ion, but to the flowers, sea-weeds, &c.—they are not animals; and so on. Thus, all things that have *proper names* have common names too.

P. Yes. Sometimes when talking of any person we use both his proper and common name; and I may as well tell you now that we always distinguish the proper name by beginning it with a capital letter.

Thus, Bonaparte, the soldier, died at St. Helena.

Or, The soldier, Bonaparte, died at St. Helena.

Or, The boy, Willie, is very good.

Or, In the great city, Lisbon, there was an earthquake.

Or, Darby, the Uran-utan, is a celebrated character at the Zoological Gardens.

In the following exercise, when you parse the nouns, you may say, first, whether they are proper or common; secondly, say their gender; and thirdly, their number. I will take the first word; thus, Darby, a *proper noun—masculine gender—singular number*.

No. 13. PARSING EXERCISE.

DARBY, the Uran-utan, is a well-known animal in the Zoological Gardens. The great city, Babylon, [is destroyed]. Jane [is riding] on our old gray horse. Poor Peg! she is a very old horse. Buy me an apple, Mary. Tell our cook, Esther, [to roast] the largest turkey. I swam across the Thames. Stir the fire, if you please, and put on some fresh coals. Tell the children that their tea is in the parlour.

SONGS OF INDUSTRY.

MORNING SONG.

He that would thrive,
must rise by five;
He that would thrive,
must rise by five;

He that has thriven,
may lie till seven.
He that has thriven, may lie till seven.

MID DAY SONG.

Your patience and prudence will not be in vain, They'll help you to
Your prudence and patience will not be in
conquer a - gain and a - gain. Your patience and prudence will
vain, They'll help you to conquer a - gain and a - gain. Your

AFTERNOON SONG.—(A ROUND.)

1st. When a worry task you find it, 2nd. Persevere, and never mind it.
3rd. Never mind it. 4th. Never mind it.

EVENING SONG.

1 What you're to do get done to day, 2
2 And do not till to morrow stay; 3
3 There's al ways dan ger in de lay. 1

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

10th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO INVENTED THE SPINNING-MULE.

P. The history of the improvements in the cotton-manufacture is rather interesting. Do you remember the names of the men who made machines for spinning?

Ion. Yes. There was first ROBERT HARGREAVES, who invented the spinning-jenny; then RICHARD ARKWRIGHT, who invented the spinning-frame.

P. And another useful machine was made by SAMUEL CROMPTON, who invented the spinning-mule.

This man is as worthy of notice as the two former; his life does not contain any remarkable events, but he is worthy to be remembered for the good which his machine effected. He teaches us to think, and work, and to persevere.

Samuel Crompton was the son of a farmer in Lancashire; he was only a village lad; and when he was young he was employed as a weaver. Perhaps he had often to travel from house to house to collect west, like the weavers whom I told you about last week. It is very likely, too, that he also followed the business of farming, for the country weavers were frequently both farmers and weavers at the same time.

When Crompton was sixteen years old he met with one of Hargreaves' spinning-jennies, and learned to spin upon it. While using it, he began to think about it; and as he did not feel quite satisfied with the sort of yarn the machine produced, he tried to improve it. Accordingly he set to work; like a wise man, he laboured patiently for five years. At the end of that time he produced a machine which would spin a yarn suitable for very fine cotton-cloth, such as muslins.

When the machine was finished, like Hargreaves, he thought that he would keep his invention a secret, so as to have the advantages of it for himself. His neighbours, however, heard of it, and they thought differently. They were like the neighbours of Hargreaves; they thought that they also would have the benefit of his invention. They at first suspected the secret by noticing that Crompton got a better price for his yarn than they did; they concluded directly that such good yarn must be made by some new kind of machine, and they attempted to discover what it was like.

They did not like to imitate Hargreaves' neighbours by breaking into his house; but they all gathered round it in a crowd, and peeped in, to steal a glimpse of the wonderful apparatus. Crompton therefore took his machine up into a garret. But that step did not mend matters; the people procured ladders, and looked in at the window.

This kind of annoyance was kept up by the neighbours for a long time, until, at last, poor Crompton was quite tired out by their inquisitiveness. He tried to get as good a reward for his invention as he could. He had not enough money to procure a patent; therefore he divided the secret of his invention amongst those of his tormentors who could afford to pay for it. He disclosed his secret to about fifty persons, each of whom gave a guinea for it. They then set to work themselves, and in time other improvements on the machine were thought of, so that yarn of a wonderful fineness was spun.

Now, let us look at the result of Crompton's invention. How long a time did I say he took to produce his machine?

W. Five years, papa.

Iou. I think that is a long time.

L. So do I.

P. And so do I; but it was not too long a time to do the thing properly. Here is a lesson to learn from Crompton. Be patient! Just as Arkwright and his partners worked for a long time, and spent about

£12,000 before they were rewarded for their labour, so did Crompton patiently give up his time. It was a great deal of time for a poor villager to give, but he never would have done anything worth noticing if he had not been so patient.

W. I think he must have had a great deal of *confidence*.

Iou. Or *forethought*, Willie! He must have known well what he was going to do before he began.

P. No doubt he did. Still he could not feel *quite* sure that he would succeed. But I dare say he had learned this proverb, "Nothing *risk*; nothing *have*."

W. I have heard that proverb before.

P. And here is another,— "What *costs* nothing, is worth nothing." So he worked on; he was not sure that he should succeed, but he depended upon his perseverance. He knew that to do great good he must take great trouble, and that no one will ever do good in the world without it. And he knew something else—

L. What was that, papa?

P. That the longer time he took in preparing his machine the more quickly it would do good. This you will see by looking at the results.

A *hank* of yarn means a large skein, containing 840 yards; and when Crompton brought to market some "No. 80" yarn, the people were, as I told you, much surprised. I do not wonder at it, for No. 80 means that 80 hanks were produced from a pound of cotton.

W. Eighty times 840! That is a great number of yards.

P. And Crompton obtained two guineas a-pound for it. But his mule was so good a machine that it was very easy to make much finer yarn after a little improvement; and two years after he had made the secret known (in 1792), Mr. John Pollard, of Manchester, spun no fewer than 278 hanks of yarn from a pound of raw cotton. These hanks form a thread of 233,520 yards, or upwards of 132 miles! But since then the power of producing fine yarn on the spinning-mule has increased wonderfully. No less than 400 hanks per pound have been produced: these measure 336,000 yards, or nearly 200 miles! Such yarn, as you look at it, seems very little thicker than a spider's web!

Ion. That seems a wonderful thing for a machine to do!

P. Yes. And do you not think it was worth while for Crompton to labour five years to produce such a machine? But even greater advantages have been produced in another way. Cotton-cloth has become very much *cheaper*, so as to be within the reach of the very poorest people. How much did I say that Crompton received per pound for his yarn, No. 80?

L. Two guineas per pound,

P. That is *forty-two* shillings. But the price rapidly became cheaper, so that twenty years ago a finer yarn (No. 100) could be sold for 3s. per pound.

thus you could buy more than fourteen times as much for the same money.

P. The improvements in machinery which have effected this wonderful cheapness are, however, partly owing to other men, one of whom we will talk about next week.

L. But, papa, you have not yet finished Samuel Crompton's history. Did he ever get any other reward for his machine than the fifty guineas which his neighbours gave him? Did he get on and become a rich man?

P. Yes; he deserved to be rich, and he was. Everybody thought so. He was not only enriched by his own earnings, but by the good-will of his fellow-manufacturers. At the beginning of the present century some gentlemen of Manchester presented him with five hundred pounds.

W. Oh, I am so glad!

P. And what was more, as he had done good service to his country, a reward was presented to him ten years afterwards in the name of the *whole nation*. The Parliament presented him with no less than *five thousand* pounds!

L. That was better still.

P. So it was. Although he could not secure a patent, yet you see he had his reward! And so will every one be rewarded in some way or other, or at some time or other, if he will only be industrious, and will work hard in doing good. You may depend upon that.

CHAPTER II.

THE PARTS OF A PLANT—THE LEAVES (*Continued*).

P. We will talk to-day of the position of the leaves on their stem. Here is a piece of geranium, Ion. Take it in your hand, and tell me how the leaves are arranged. Do they all grow from the same side of the stalk?

Ion. No. This bottom leaf grows on the side of the stalk nearest to me; the next grows on the opposite—no! not the *opposite* side, but a little to the side of the part where the first grows; and the next leaf is a little to the side of that; and the next, ah! the next is on the side exactly opposite to that of the first leaf; and here, higher up, we have come round again to one on exactly the same side of the stalk as the first leaf.

P. True, they are arranged regularly, as different parts of the stalk; but it is not so with all leaves. Here is a piece of the snow-*berry* plant; how are the leaves arranged?

W. They are in pairs, one exactly opposite to the other.

P. And now look at the leaves of this plant!



Whorl.

Ion. They all grow together from one part of the stalk—one

leaf is not higher than another; there is no space between them.

P. The form which the leaves thus make is called a "whorl." Thus the leaves of this plant are said to be *whorled*; those of the snow-*berry* plant are said to be *opposite*; and those of the geranium are *alternate*. Would you like to remember some more names?

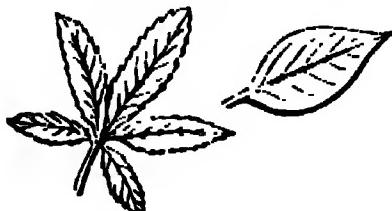
L. Yes, please, papa.

P. Then you may remember that the point in the stem from which the leaf springs is called a *node*; and the spaces on the stalk between the nodes are called *internodes*. You will want these words, to use, soon.

The size and shapes of leaves are next worthy to be noticed. Of their size it is enough to say, that they are of all sizes. There are leaves which almost require a microscope for examining them, and others which are between thirty and forty feet long.

W. And forty feet is about twice as long as the two parlours when the folding-doors are open.

The shapes of leaves are very varied. Here are two—



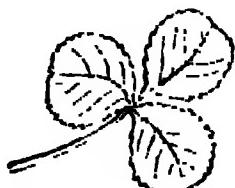
Compound and Simple Leaf.

What difference do you observe in them?

L. One consists of several small leaves.

P. These we call *leaflets*. A leaf consisting of leaflets is called *compound*; and the other, which has only one broad lobe, is called *simple*. Sometimes the leaflets are so large that it might be difficult to say whether they are distinct leaves or not. You may, however, easily know when the leaves begin to fall: if each leaflet fell off separately, it would be termed a leaf, but when they still continue joined to one stalk, and thus fall off together, this shows that they are only parts of one large leaf.

Let us look at one or two different compound leaves, and learn their names. This leaf



Ternate Leaf.

consists of three leaflets, and is called *ternate*.

Here are some leaves with more than three leaflets; they are said to be *pinnate* leaves.



Pinnate Leaves.

You see that the midrib of the leaf is naked like a leaf-stalk; and the veins branching from it form midribs to the leaflets.

Here are some leaves which are still more divided.



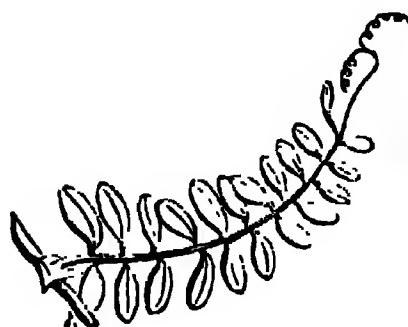
Bi-pinnate and Tri-pinnate Leaves.

L. Yes; the *side veins* also become stalks, and bear leaflets, just as the midrib of the pinnate leaf does.

P. And it is therefore called a "bi-pinnate leaf." Here is another, which is yet more complicated; it is called a *tri-pinnate* leaf.

W. Yes, it seems to be made of a number of bi-pinnate leaves joined to a great midrib. Thus *ternate* and *pinnate* leaves consist of leaflets; *bi-pinnate* leaves are made up of *pinnate* leaves; and *tri-pinnate* leaves are made up of *bi-pinnate* leaves joined to a large midrib.

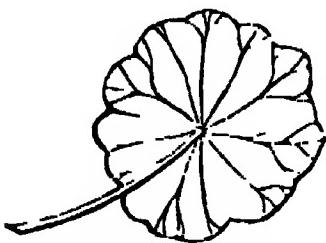
P. Here is a pinnate leaf worth noticing. What do you observe of the midrib at the end?



I. It has no leaflets growing from it, so it has curled itself up.

P. And it thus forms a *tendril*. This is the case with the leaf of the pea, tare, and others. Here is the leaf of a nasturtium, which grows in a curious way. Look at its midrib!

L. It has one, two, three, four, five—it is full of "midribs," papa.



Nasturtium Leaf.

P. Yes. Instead of being one leaf, it consists of several leaves whose parts have grown together; they form what is called a *peltate* leaf.

W. Do you know any more shapes, papa?

P. Yes. There are some leaves very thick in shape; they usually grow in dry places, and are very fleshy and moist. This is because they have few sto-

mata for the water to evaporate through. We call them *succulent* leaves, such as those of the house-leek, or the cactus plant.

Before we leave our subject, you may observe the variety which presents itself even in the simple leaves. I have copied a little drawing for you, in which the principal forms are presented at one view.*

The most common forms of leaves are the line-shaped, or *linear* (No. 1); the lance-shaped, or *lanceolate* (No. 2); the *oval* (No. 3); and the *oblong* (No. 4). A round leaf is termed *orbicular* (No. 5); and an egg-shaped leaf, *ovate* (No. 6); the same reversed is called *obovate* (No. 7).

No. 8 is said to be heart-shaped, or *cordate*; and No. 9 is termed kidney-shaped, or *reniform*.

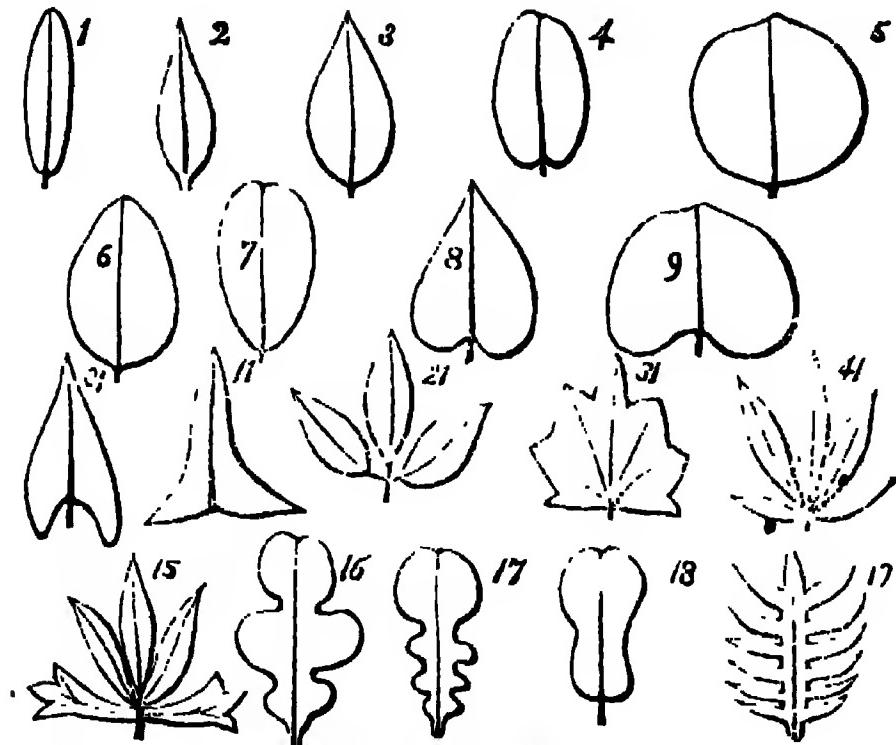
No. 10 resembles the head of an arrow, and is termed arrow-headed, or *sagittate*; others, such as No. 11, are known as halbert-shaped, or *hastate*.

No. 12 has some resemblance to the fingers in its arrangement, and is termed *digitate*; No. 13 is said to be *palmate*, because the veins are still united.

Leaves such as No. 15 are *pedate*, so called from their fancied resemblance to birds' feet.

When the margins of leaves are smooth and undivided, they are termed *entire*; if furnished with sharp-pointed teeth, *dentate*; if the teeth are directed

* Wilson's Catechism of Botany.



The Forms of Leaves.

fowards like those of a saw, ' *peltate* leaves. We have also *linear*, *lanceolate*, *ovate*, *oblong*, *reticular*, *ovate*, *oborate*, *cordate*, *reniform*, *sagittate*, *hastate*, *digitate*, *palmate*, *peltate*, *cuneate*, *dentate*, *serrate*, *crenate*, *sinuate*, *lyrate*, *pandariform*, and *pinnatifid*.

W. What a number of hard names we shall have to learn! I will count them up.

"Leaves differ in their shape, being either *simple* or *compound*. Thus we have *ternate*, *pinnate*, *bi-pinnate*, *tri-pinnate*, and

We shall have to be very careful to learn all these names, and to remember their meanings also. If you please, papa, may we go in the garden?

P. If you like. And find me some *oblong* leaves.

WHEN is a man less than a man?
When he takes delight in raising strife;
When he values honour less than life,
When he insults a fallen foe,
Or at a woman aims a blow;
Then is a man less than a man;
Then we pity him all we can.—C. MACKAY.

THE TUDORS.

HENRY VIII.—THE REFORMATION.

P. The Pope's sentence of ex-communication against Henry was passed, but it was not sent forth immediately. Before doing so, the Pope tried every means to make up the quarrel.

Henry, however, had gone too far to go back; and he had several reasons for not doing so. One was, that his new office as "Head of the Church" increased his riches; for, as I told you, he now received the money which used to flow into the Pope's coffers. He saw, too, that the priests of his church still had too much money, and he determined to have some of it himself. Again, he saw that they still had too much power; and he determined to take it from them. Again, he saw that many were still very wicked men, whilst some were disobedient to himself; he therefore determined to punish them. Thus Henry, as head of the Church, could gratify his covetousness, his anger, and his pride, which he could not do if he allowed the Pope to have power again.

To execute his plans was very easy, for Henry had assistants who faithfully obeyed all his commands. The men to whom the work of Reformation was entrusted, were *Cranmer*, who had become Archbishop of Canterbury; and *Thomas Cromwell*, the Secretary of State. The latter man is worthy of notice: like *Wolsey*,

he was of humble origin; he was the son of a blacksmith. He was the confidential servant of *Wolsey*, and after the Cardinal's death the king found him to be as useful as his master had been.

In the year 1535, in which Henry was declared the "Head of the Church," and Sir Thomas More was beheaded, *Cromwell* was ordered to begin the work of reform, by visiting the monasteries of England. Accordingly, in 1536, *Cromwell* appointed several men, as his commissioners, to travel through England, and enter these religious houses, so that they might bring a report of their condition. These men, and *Cromwell* himself, reported that the monks therein lived most irreligious and disgraceful lives; that they committed all kinds of wickednesses, which were even as great as those of the men of Sodom.

When their account of the crimes and deceptions of the monks was read, a general horror was expressed by the people, and it was determined that the so-called "religious houses" should be suppressed. The lesser monasteries of England were then entirely abolished; their yearly revenue, which amounted to £32,000, and their gold and silver plate, and other riches, were handed over to the king as the head of the Church. Thus the king

was enriched, and the clergy were punished at the same time.

Cromwell was found to be a most suitable man to carry out the king's violent plans. It is said that he hated the clergy, and the clergy hated him. Henry had appointed him to be his "Vicar-general of England," which means that he took the king's place. He expected to be treated with even greater respect than the Archbishop of Canterbury. The monks and clergy, therefore, instead of becoming reconciled to the king by Cromwell, were now more bitterly opposed to him. They had opposed Henry's marriage with Anne Boleyn, many now openly opposed the king's supremacy, and denounced him from their pulpits.

By such proceedings the monks only hastened their own destruction — they were only exciting the Royal Lion to tear them to pieces. The enraged Henry ordered a visitation of the *greater* monasteries of England. Some of these houses were really well conducted and useful places, but the commissioners who were sent to examine them brought back nearly the same reports as before. It was then voted that these monasteries also should be pillaged and demolished; and in the year 1538 the immense work of destruction was accomplished.

A wonderful amount of riches was brought to Henry by these unjust proceedings. The commissioners and many others shared in the spoil, which was as great as if a kingdom had

been taken. It was never supposed that the king would have dared to commit such a wholesale robbery; but by taking care that the nobles and courtiers should be enriched by it, he quieted their opposition. The celebrated shrine of St. Thomas à Becket at Canterbury was destroyed on this occasion. It is said that the gold with which it was adorned filled two large chests, which eight strong men could scarcely carry out of the church. When the work of spoliation was over 645 monasteries, 90 colleges, 2,374 chapels, and 110 hospitals had been suppressed. The yearly revenue from all these establishments amounted to £161,000.

Although the nobles, generally, did not oppose these robberies, the people of England did. It was, however, soon proved to them that many of the places they had reverence were little better than dens of thieves. The tricks of the monks were exposed. A crucifix was brought forth, which was said to be miraculous because its lips, eyes, and head had always moved when it was prayed to; this was broken open, and the people saw the secret springs and wheels inside by which it had been moved. When this and hundreds of other deceptions had been discovered, the people began to feel that the monks who had practised them were not worthy of confidence.

When Cromwell, the Vicar-general, had thus broken up the *old* church, he set to work to form the new one. Having shown the people the darkness

and ignorance of their religion, his next business was to bring them the light of the TRUTH instead. But both Cromwell and his master were unjust men, for they had committed robbery; therefore they had not much of the light of the gospel. The light which they brought to the people's minds was very pale indeed. The people were only allowed to believe as much of God's truth as the king believed, which was very little, for many of Henry's doctrines were almost the same as those taught by the Pope.

The Parliament, however, in the year 1539, passed a law in which the religious belief of the king was plainly stated. In this law, which was afterwards called the *Bloody Statute*, it was again declared that the king's was the *true* belief, and that all persons who differed from it were guilty of *heresy*, and should suffer death.

But this plan of enlightening the people did not succeed at all. God's word had secretly been studied by many since the time of Wycliffe. Those who had been enlightened by it had some opinions of their own, and were Protestants of the same opinion as Martin Luther. Numbers of those who had not been enlightened were still determined Papists; so that neither of these large classes of men approved of Henry's views. Plenty of "heretics," therefore, were soon found, and great fires soon blazed in many parts of England.

Thus, when Henry tried to introduce the light of the Gospel by *force*, he only raised these cruel lights of persecution. Religious truth cannot be taught by force.

It was well for the English people, that better means of teaching them were tried. The providence of God directed the Reformers, bad as they were, in the right way. The Vicar-general, and the Archbishop, gave the people permission to read the Scriptures in their own language. They directed that a translation of the Bible, which had been made by Miles Coverdale and William Tindal, should be placed in every church in the kingdom. The bibles were chained to the reading-desks; and the churches were crowded daily. Thousands learned to read on purpose to read the Scriptures. Great good was thus gained; but all did not profit alike by their privilege. Just as the brightness of day when it suddenly shines upon men who have lived all their lives in the dark, dazzles and confuses them; so were the minds of the poor ignorant Catholics dazzled and in confusion with the truths they read. Like the early disciples of our Lord, they fell into habits of disputing. Instead of learning a little at a time, they saw so much that was new, that they saw nothing very clearly; they fell into mistakes, tried to correct each other, and were angry because they could not agree.

THE ENGLISH TRAVELLER.

LONDON—ANCIENT BUILDINGS (*Continued*).

"MY DEAR CHILDREN,—

"The WARDER I spoke of was dressed in his beef-eater dress. He came to conduct us round the building."

"These *Warders* of the Tower," whispered my friend to me, "were established by Henry VIII. You may have read in English history how that king's father, Henry VII., formed the first standing army by having a staff of soldiers called yeomen as a body-guard. Henry VIII. placed fifteen of these yeomen here, and gave them the name *Warders*. The curious dress they wear is the same as that of the yeomen of the guard. There are now fifty warders; and when there are any vacancies, they are filled up by soldiers from the army who have merited the honour by good conduct."

"Our guide, the warden, took our tickets, and gave them to the Armoury-keeper. I cannot describe to you all the parts of the building which he then showed us. We saw the *Middle Tower*, and the *Bell Tower*, so called from containing the alarm-bell of the garrison. We next saw the *Traitors' Gate*, through which traitors and all offenders were conveyed in a boat; it was a dismal place, and well it might be, for it was the gate of death to most who entered. Opposite to this gate we saw the *Bloody Tower*, where it is

supposed that the two infant princes were murdered by their wicked uncle the Duke of Gloucester.

"We passed other places of note, and reached the *White Tower*, at the corner of which we found the entrance to the House Armoury. On entering this place we found ourselves in a room 150 feet long, and 33 feet wide. I was amused by the long line of figures on horseback, placed down the centre; the ceilings and walls were ornamented with military trophies, ancient halberds, shields, cuirasses, &c.

"The first suit of armour we noticed was that of the times of Edward I.

"I think," said my friend, "that I may as well continue the facts in history which I was relating just now. We will talk of the times to which each piece of armour belonged.

"In the reign of Edward I." he said, "the Tower was chiefly used as a state-prison. Six hundred Jews were imprisoned for clipping the coin; the other important prisoners were the Scottish King *Baldwin*, and the hero of Scotland, *Sir William Wallace*, who, you may remember, was so infamously treated, to the great disgrace of Edward I.

"EDWARD II. seldom resided in the Tower.

"In EDWARD III.'s reign, the Tower was occupied by

prisoners taken in the great battles of *Cressy* and *Poictiers*. DAVID, the King of Scotland, and JOHN, the King of France, were both prisoners at the same time.

"In the reign of Edward's grandson, RICHARD II., Wat Tyler and his barbarous crew got possession of the Tower. They seized the *Archbishop of Canterbury*, and beheaded him on Tower Hill with brutal cruelty.

"HENRY IV. was an usurper; and the Tower was the prison of many who rebelled against him. JAMES, *King of Scotland*, was the most illustrious of the prisoners; he was the *third Scottish king* who had been imprisoned in the course of a century.

"The battle of Agincourt, in the reign of HENRY V., supplied more French prisoners for the Tower.

"Here is a noted piece of armour. It belonged to the times of HENRY VI. You may remember that unfortunate king and his masculine wife, *Margaret*, who dragged him into so many battles with the House of York. He was, you know, at last dethroned by the Duke of York, who became King EDWARD IV. The poor king was murdered here.

"This, he continued, passing on, 'is an elegant suit of armour. It represents the times of the gay and cruel EDWARD VI.; the horse, you see, wears the king's badge, the white rose and crown. The king's brother, the *Duke of Clarence*, was the most important pri-

soner; he was drowned in a butt of malmsey wine, in the part called the *Bowyer's Tower*.

"Here is a knight of the time of RICHARD III.; he is dressed in ribbed armour. *Jane Shore*, *Lord Hastings*, and the young king, *Edward V.*, and his brother, were all imprisoned here by Richard.

"The next knight, whom you see dressed in *fluted* armour, belongs to the period of HENRY VII. *Perkin Warbeck*, *Sir James Tyrell*, who caused the young princes to be murdered, and the young *Earl of Warwick*, son of the ill-fated Clarence, were prisoners here, until they were put to death.

"The next suit of armour is that of King HENRY VIII.; it belonged to the monarch himself. In the reign of this savage king, the Tower was crowded with prisoners, including *Sir Thomas More*, *Bishop Fisher*, *Anne Boleyn*, *Thomas Cromwell*, *Catherine Howard*, and many others. The *Countess of Salisbury* was beheaded merely because she was the last descendant of the House of Plantagenet. The venerable and spirited lady was accused of favouring Popery, and without any trial was conducted to the green, to be beheaded. She, however, declared that she was no traitress, and refused to place her head on the block. She told the executioner that if he would have her head, he must win it the best way he could; and then she ran about the scaffold pursued by the headsman, who aimed many fruitless blows at her neck, before she fell.

"But I need not tell you of all the suits of armour we saw. There were suits of the times of EDWARD VI., MARY, ELIZABETH, JAMES I., CHARLES I., JAMES II., and the succeeding reigns. Their appearance brought forth from my friend a gloomy account of many more unfortunate prisoners. We remembered the good *Duke of Somerset*; *Lady Jane Grey*, and her husband; her father, the *Duke of Northumberland*; *Sir Walter Raleigh*; the *Earl of Essex*; the men of the Gunpowder-plot; *Archbishop Laud*; the *Earl of Strafford*, and many others. Certainly the Tower is one of the most notable prisons in the world.

"We went from the horse-armoury to other places, which I need not describe to you. The only one which I must not omit is the REGALIA, where the Crown Jewels are kept. We paid another sixpence for admission to this fine show. We saw the *Ancient Imperial Crown*, made for Charles II.; the *Ancient Queen's Crown*; the *Prince of Wales's Crown*; the *Royal Sceptre*; the *Orb*; the *Swords of Justice and Mercy*; the new *State Crown* of Her present Majesty; and many other rare and valuable articles. We also talked over the history of the infamous man named

Blood, who attempted to steal the crown and sceptre in the year 1671. The *rack*, and other ancient instruments of torture, were, perhaps, the most painful remembrances of the 'good old times' that we saw during our visit. One of the most curious objects was the old walking-staff of HENRY VIII. Within it are three matchlock pistols, and a short bayonet is placed in the centre of the barrels. It is said that, armed with this trusty companion, the monarch used to walk the streets of London in disguise after night-fall.

"On leaving the Tower, we stopped to notice the MINT, a fine stone building on the eastern side of Tower Hill. 'In this building,' said my friend, 'the money of England is coined. The workshops and offices are very complete; they were formerly under the direction of an officer named the Master of the Mint. Lately, however, some important alterations have been made; I do not know exactly what they are.'

"Suppose we take a cab, and go to see St. Paul's?"

"By all means," I replied; and thither we went. What we saw shall be recorded in my next letter.

"Your affectionate friend,
"HENRY YOUNG."

HOPE.

WHEN death's cold touch thrills to the freezing heart,
Dreams of heaven's opening glories I impart;
'Till the freed spirit springs on high,
In rapture too intense for weak mortality.

BEATTIE.

ETYMOLOGY.

CHAPTER III.

INFLECTIONS OF THE PARTS OF SPEECH—NOUNS AND PRONOUNS.

Lesson 14.

THE CASES OF NOUNS
AND PRONOUNS.

P. Suppose that an action is performed, Willie,—there must always be somebody to do it; and generally there is some one whom the action is done to. Thus—James pushed John. Who did the action?

W. James did.

P. Then James is said to be the *nominative* to the verb pushed. Now tell me whom the action was done to.

Ion. You said that he pushed John.

P. True; and, as the action was done to John, the word John is in another case—one which is quite opposite to the nominative.

W. What is that case called?

P. It is called the *objective* case. So you may say that—

James is a noun in the nominative case;

Pushed is a verb; and

John is a noun in the objective case.

Ion. I will make three sentences with these cases in them—

Mary stroked the cat.

The hail broke the glass.

The boy was spinning a top.

The three nominative cases are—Mary, hail, and boy; because each performed an action.

P. Who performed the action in the following sentence?

John was pushed by James.

W. James did.

P. But the word James is not the nominative to the verb was pushed. "Was pushed" is a verb expressing an action being *done to* a person—

L. I remember those verbs—and there were verbs which expressed *being* something, as well as doing something.

P. True; and in the sentence, "John was pushed by James," if you want to find out the nominative, instead of asking, "Who did the action?" you ask, "Whom was the action done to?"

W. That is because "was pushed" is a verb that expresses a being done to. So I will ask, "Who was pushed?" Answer—John was.

Ion. So John is in the nominative case this time; and James is—in what case?

P. James is in the *objective* case—it is made objective by the preposition *by*: thus, having changed the kind of verb, you have changed their cases.

W. I think that the best way is to notice that the nominative case is *before* the verb; and the objective case *after* it. I will mark the two nominative cases in capital letters.

JAMES kicked John.

JOHN was kicked by James.

Both the nominatives are *before* the verb.

P. But that is not a sure way of telling, Willie. Look at these sentences—

P. Here comes the milkman.
Lo! there goes my hat.

N. Now ask, "Who comes?"

W. The milkman comes.
And if you ask who *goes*, the answer is the hat; so in these sentences the nominatives are placed *after* the verb. The best way is to take the verb, and ask, "Who does the action?"—or, "Whom was the action done to?" as you told us at first.

P. That is the right way. You shall see how easy it is to find the nominative by asking that question.

Here is a sentence—

The boy *burnt* the paper.

I. Who burnt the paper?

—The boy.

P. Again—

The paper was burnt by the boy.

I. What *was burnt* by the boy?—The paper.

P. Here are my brothers.

I. Who *are* here?—My brothers.

P. The mutton is underdone.

I. What is underdone?—The mutton.

So the nominative cases in these four sentences are—boy, paper, brothers, and mutton.

W. I think it is a great pity that when a noun is put in the objective case, it is not *altered*.

We alter nouns when we change their genders, and when we change their number. Thus, man, *woman*; man, *men*. But we say, "The man struck the man," "The woman loved the woman"; and the nominative and objective are alike.

P. In the Latin language the words are changed. Thus, when the Romans wrote "a man," in the nominative case it was spelt *homo*, but when it was written in the objective (or, as they call it, "accusative") case, it was spelt *hominem*.

I will now give you the rule for finding out the cases.

The nominative is *generally* before the verb, and the objective after it. But the nominative may *always* be found by putting who, or what, before the verb, *so* as to make it a question.

L. Are there any other cases, papa?

P. Yes. A noun may be so called as to show that the person it represents *possesses* something. You are named Lucy, and you possess this gown. Write your name on this slate, and then write the word gown after it, to show that you possess it. Thus—Lucy, gown.

L. I can alter it—I must put a little comma (called an *apostrophe*) with an 's after my name. So—Lucy's gown.

P. That apostrophe and 's show that you possess the gown; and a noun so altered is said to be in the *possessive* case. Make these words possessive:—

Rabbit, cow, Willie, papa, the table, the man, the horses.

I. I will write them all.

The rabbit's long ears—the cow's milk—Willie's top—papa's hat—the table's surface—the man's basket—the horses's—

W. You must not say "horses's," Jon!

J. But I have only put an

apostrophe and an s—that is all! still *I* think it does not sound well.

P. No; the truth is, the plural nouns which end in s, do not require another s to show that they are possessive—an apostrophe alone is sufficient.

It is the same with a few singular nouns which end with double s. Thus—

For goodness' sake have pity.
For righteousness' sake do good.

L. We have learned of three cases of nouns, papa—of the nominative, the objective, and the possessive cases. Are the cases of the pronouns hard to learn?

P. No, you have already learned to speak these pronouns in their proper cases, so you may easily point them out. I will repeat the pronouns once more.

I, thou, he, she, it, we, you, and they.

These are all in the nominative case. In each of the following sentences you will find the nominative pronoun used instead of the objective; you will at once see which are the objective cases required, and you may then supply them:—

He loves *I*.

He loves *thou*.

We will love *he*.

We will also love *she*.

And we will love *it*.

He also loves *we*.

He also loves *you*.
He also loves *they*.

Ion. The objective case for I is *me*—for thou, *thee*—for he, *him*—for she, *her*—for it, *it*—for we, *us*—for you, *you*—and for they, *them*.

P. Right. It is quite as easy to point out the possessive cases of the pronouns. In the following sentences change the nominative pronouns for those in the possessive case:—

Here is *I's* book.
Here is *thou's* book.
Here is *he's* book.
Here is *she's* book.
Here is *it's* book.
Here is *we's* book.
Here is *your's* book.
Here is *they's* book.

W. I must be changed to *my*—the possessive case of thou is *thy*—of he, *his*—of she, *her*—of it, *its*—of we, *our*—of you, *your*—and of they, *their*.

P. We can thus easily make a table of the pronouns in their different cases.

Nom.	Objective.	Possessive.
I	me	my
thou	thee	thy
he	him	his
she	her	her
it	it	its
we	us	our
you	you	your
they	them	their

In the following parsing exercise you may say the gender, number, and case of each noun and pronoun.

No. 19. PARSING EXERCISE.

The tailor made James's coat. James's coat [was made] by the tailor. You [shall be sent] to bed. I [have taken] his peach; it is not his, it is my peach. You think it is your peach. Here is your pencil. We cried. They wept. He frightened us—he is our brother.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

11th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO INVENTED A POWER-LOOM. *

HARGREAVES, Arkwright, and Crompton were cotton-spinners; that is to say, they spun the cotton-wool into *yarn*, or thread. To-day we will finish our account of the cotton-trade with the history of a man who made improvements in *weaving*--one who found out how to *use* the inventions of the others, how to take their fine cotton-yarn, and weave it into cloth.

In the summer of the year 1784 there was a visitor at Matlock, in Derbyshire, named the Rev. Dr. Cartwright. Matlock is surrounded by most romantic scenery, and is generally filled with company in the summer-time. It happened in the summer when the Rev. Dr. Cartwright was there, that there came visitors from Manchester, and he fell into their company. Being men of business, they began to talk of cotton-spinning, and of the improvements that had lately been made by a man named Arkwright, who had invented a spinning-frame. Almost everybody in the cotton-trade had heard of this Arkwright, and liked to talk about him.

"Ah!" said one of the Man-

chester gentlemen, "as soon as Mr. Arkwright's patent ceases, we shall be overrun with spinning-machines. Instead of the weavers having to seek for their yarn, there will be so much cotton-spinning that we shall not find hands enough to weave it."

When Dr. Cartwright heard this, he replied that Arkwright should next set his wits to work and invent a new weaving-mill.

"That," said the Manchester men, "is impossible; it would be of no use to try, because"—and they brought forth a number of arguments to prove that it was impossible, which neither you nor I could understand unless we were in the cotton trade.

Dr. Cartwright himself did not understand them. The manufacturers might believe it to be impossible to weave by machine, but he did not; at least he would not until he had tried.

The manufacturers again declared that it *was* impossible to make such a machine.

Again Dr. Cartwright did not believe them. He told them that lately there had been exhibited in London a

figure with a machine inside, which moved it, and caused it to play at chess. "Now, gentlemen," he said, "you cannot assert that it is more difficult to make a machine which shall weave, than a machine which shall make all the various moves in that difficult game."

But the Manchester gentlemen and the clergyman still disagreed in their opinions, and the subject was dropped.

This conversation, however, was not forgotten. Some time after, the Rev. Dr. Cartwright was thinking of the arguments he had used, and it struck him that weaving was not, after all, such a very difficult thing; according to his idea, it only required three movements. "And then," he thought, "these movements follow one after another in succession, so it cannot be difficult either to produce or to repeat them by machine;" and then he thought again, "*I'll try to do it.*"

Being quite full of his thoughts, he made a plan of the sort of machine which he thought would be required, and sent in a great hurry for a carpenter and a blacksmith to make it. The men did so, and Dr. Cartwright then sent for a weaver to put in the long threads or *warp*, it was rather thick warp, such as sail-cloth was made of, but it answered the purpose for a trial, and to the Doctor's delight the trial was successful; it brought forth a piece of cloth. It was a rather rough specimen, but that did not matter; it was good enough for a first attempt.

In making this machine Dr. Cartwright was under great disadvantages. He had never before turned his thoughts to mechanism. He had never even seen a loom at work, nor did he know how such a thing was made; so his first loom was, as you may suppose, a rude piece of machinery. It required two powerful men to work it.

The inventor, however, thought it a very good one. In his simplicity, he supposed that he had accomplished all that was required; and he took out a patent for his machine, thinking that it was a most valuable property. This was done 4th August, 1785. He then went to a weaver's establishment that he might see how other people wove, for he had not condescended to learn anything from others before. But on watching the weavers he was, as he says, astonished. Their modes of working, when compared with those of his machine, were, he found, very much easier. His pet machine could not bear comparison with theirs, so he went home again to make a better.

W. Why, what a strange man! he should have gone to see the other weavers at first, before he tried to make one himself, or took out a patent.

P. He is not more strange than many men and boys. Many people are just as careless in what they say or do; they often give opinions, and afterwards listen to the opinions of others; then, they find that

it would have been better to be more patient, and to wait until they had gained more information; thus they could have formed a right opinion *before* they had spoken. So people often make things, and find out a better way, after they have finished.

L. Yes. Dr. Cartwright should have known Samuel Crompton, and have learned from him to be patient. Then he would have had more forethought.

P. I dare say that he *had* more forethought after this

first experience. Dr. Cartwright's children still remember seeing him as he walked to and fro in deep meditation. They used to watch him throwing his arms about from side to side, and they found that he was thinking of weaving and throwing the shuttle.

After much thinking he set about to work again, and formed another machine. This loom was, of course, much superior to the other, and he took out his second patent two years after the first, on 1st August, 1787.

(*Continued on page 177.*)

HYMN FOR A LITTLE CHILD.

God made the sky that looks so blue,
God made the grass so green,
God made the flowers that smell so sweet,
In pretty colours seen.

God made the sun that shines so bright,
And gladdens all I see,
It comes to give us light and heat;
How thankful should we be!

God made the cow to give nice milk,
The horse for man to use;
I'll treat them kindly for His sake,
Nor dare His gifts abuse.

God made the water for our drink,
God made the fish to swim,
God made the trees to bear nice fruit,
Oh! how should we love Him.

Where'er we turn our wondering eyes
His skill and power we see;
He made the earth, He made the skies,
And he made you and me.

ANON.

CHAPTER II.

THE PARTS OF A PLANT—THE LEAVES.

P. We have had a long talk about the leaves; we have heard of their principal *organs*, their *functions*, their *position* on the stem, their different *sizes* and *shapes*, and to-day we will talk of their *appendages*.

L. We call a thing an appendage when it is joined on to another. I have never seen any appendages to leaves.

W. But I have; and I have felt them. On a certain nettle there are appendages called *stings*.

Ion. And on the holly there are appendages called *prickles*.

L. And my geranium-leaves have very fine *hairs* growing upon their surface.

P. Yes; we will begin our lesson with the *hairs*. In some leaves they cover the surface, forming a smooth down; but such leaves are often hairy or not, according to the circumstances in which they grow.

Ion. That is just like the down and fur of animals; those which live in cold climates have thicker fur than those of warm countries.

P. It is almost the same with the vegetable hairs; some of them make the leaves look like thick flannel, or the felt of a hat. The hairs on the plants which grow in the Alpine snows protect the leaves from the cold. In other cases, being so thick they protect the moisture from evaporating too

rapidly. They also have other functions.

L. Do you know, papa, I think that one function of the hairs is to collect water; for, the other morning, when Willie and I were in the garden before breakfast, we picked the leaf of that very hairy plant—I don't know what it is called—and it was covered with little round drops of dew which glistened like pearls. Oh! it was very beautiful.

P. That is the function of the hairs to which I alluded. Thus you may find the leaves of a plant growing in a damp shady place to have no hairs; they do not require them. But if that plant be removed to a dry exposed situation, the leaves will become smaller, and be covered with hair. This is easily explained. The dryness of the soil is not favourable to the growth of *large* leaves. The material which would be used to form the outside skin (cuticle) of the leaf is therefore used to form hairs; these collect from the air the moisture which is required because of the dryness of the soil.

You would like to watch these little hairs at their work. They are fellow-workers with the little rootlets under the earth. Both also work in the dark. During the day the hairs lie flat on the surface of the leaf, but as the evening-time

approaches they separate from one another, and lift up their points. Then, as the dew falls, it collects around them in minute drops. Thus, in the morning the surface of the leaf is sparkling with dew like the one you saw in the garden.

L. And what becomes of the dew? The dew on that hairy leaf was all gone by the middle of the day.

P. A part of the dew *evaporates*, ascending the atmosphere, and part is absorbed by the leaf. The increase of weight which some leaves gain by the absorption of water is very surprising. When the heat of the sun begins to vaporise the dew, the hairs fall down again; and, interlacing each other, they form a layer of minute cavities outside the skin of the leaf.

W. And make a clothing for the leaf, and prevent it from giving forth its moisture too rapidly, as you said.

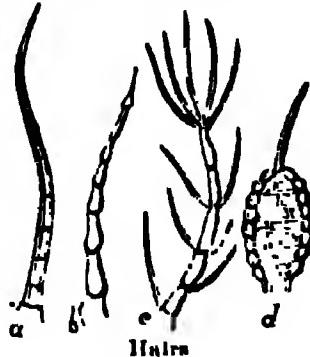
P. True; and yet the *cavities* they form allow of some moisture being evaporated from the thin sap. How perfect is this arrangement! It is like all the works of God.

Would you like to hear of another function of the hairs?

W. Yes, papa, please.

P. Most vegetable hairs, then, are hollow like the hairs of your head. Those marked *a* and *b* are simple hairs, *c* is a piece of branching hair, and *d* is a hair with a gland at its root. Let us look at the function of *d*. Suppose that you slightly touch a leaf on which

such hairs grow. You then press



the hair down into the gland, which contains an acrid, poisonous fluid. By this means the fluid from the gland is also pressed up through the hollow tube of the hair; it comes through at the point which has entered your finger, and causes you to feel a sharp pain.

I. Yes, it stings. You are talking, papa, of a stinging-nettle—we call such a hair, a STING.

P. We do; but, on the other hand, some hairs grow upon glands containing a substance with a sweet odour; such as the *sweet-briar*. PRICKLES are another kind of appendage which you noticed. They differ from hairs in not being hollow, in being harder, and larger. You may observe the prickles on the stalk of a *rose*; they grow from the skin, and are easily broken off. The prickles of the *holly* are merely the terminations of the veins, which have become hard and pointed. When cultivated in a rich soil, the holly has been noticed to lose its prickles; thus, the appearance of the tree has been quite changed.

L. What are thorns, papa? Are they not large prickles?

P. No; thorus differ from the picture of the leaf of a prickles, because, instead of growing from the skin, they grow from the sap-wood; so they cannot be broken off so easily. Indeed, they are not parts of the leaves.

There is another appendage of the leaf, which you have not noticed.

L. In what part is it found?

P. At the end (the base) of the leaf-stalk,—the end which is nearest to the tree.

W. I have seen the part you mean, papa, it is like a scale; I should call it a leaf-scale. You may see it on the stalk of a rose leaf; and also in

the picture of the leaf of a tare, which we saw last week (page 116).

P. This leaf-scale may also be seen in the leaf-stalk of the rhubarb and heart's-ease. It has another name; just as we call the leaf-stalk the *petiole*, so we call the leaf-scale the *stipule*, which word is more generally used.

Ion. So we have heard of four appendages of leaves—hairs, stings, prickles, and stipules. I think, papa, we shall not have time to write our "memory-lesson" now. May we learn it next week?

P. Yes—we will do so.

AN INDIAN'S GRATITUDE.

AN OLD LEGEND.

Now had the autumn day gone by,
And evening's yellow shade
Had wrapt the mountains and the hills,
And lengthened o'er the glade.
The honey-bee had sought her hive,
The bird her sheltered nest,
And in the hollow valley's gloom
Both wind and wave had rest.

And to a cottar's hut that eve
There came an Indian chief;
And in his frame was weariness,
And in his face was grief.
The feather o'er his head that danced
Was weather-soiled and rent,
And broken were his bow and spear,
And all his arrows spent.

And meek and humble was his speech,
He knew the white man's hand
Was turned against those wasted tribes,
Long scourged from the land.

He prayed but for a simple draught
Of water from the well,
And a poor morsel of the food
That from his table fell.

He said that his old frame had toiled
A wide and weary way,
O'er the sunny lakes and savage hills,
And through the bogs that day.
Yet when he saw they scoffed his words,
He turned away in woe,
And cursed them not, but only mourned
That they should shame him so.

When many years had flown away,
That herdsman of the hill
Went out into the wilderness
The wolf and bear to kill—
To scatter the red deer, and slay
The panther in his lair,
And chase the rapid moose that ranged
The sunless forests there.

And soon his hounds lay dead with toil,
The deer were fierce and fleet,
And the prairie tigers kept aloof
Where they heard his hostile feet.
No bread was in that desert place,
Nor crystal rivulet
To shake the torment of his thirst,
Or his hot brow to wet.

He feared—he feared to die—yet knew
That nought on earth could save;
For none might catch his parting breath
And lay him in his grave.
But lo! while life's dim taper still
Burned feebly in his breast,
A ministering angel came—
His hated Indian guest!

He shared his wheaten loaf with him,
His cup of water shared,
And bore the sick man unto those
For whom his heart most cared.
“I cursed you not,” the Indian said,
“When thou wast stern to me,
And I have had my vengeance now;
White man! farewell to thee!”

M'LELLAN.

THE TUDORS.

HENRY VIII.

W. You told us, last week, how the people had permission to read the Bible.

P. Yes; and I said also that the people did not use their privilege well. They did not treat God's word with proper reverence: they began to form their opinions without asking for His guidance, and to make disputes.

Having related to you Henry's quarrel with the Pope, and the beginning of the Reformation, I have told you of the principal events of his reign.

Henry, and Cromwell, and Cranmer, soon perceived these things; they then found it better to alter the permission they had given. An act of Parliament was passed in which it was said, "*That many seditions and ignorant persons had abused the liberty granted them of reading the Bible, and that great diversity of opinion, animosities, tumults, and schisms, had been occasioned by perverting the sense of the Scriptures.*"

In this act it was ordered that only gentlemen and merchants should peruse the Scriptures; and this was only allowed *provided it be done quietly, and with good order.* But even this permission did good. The REFORMATION had begun in earnest. Popery began to flee from the presence of God's truth, just as the heavy mists which have gathered in the darkness are dispersed by the morning sun.

The other remarkable circumstances are the wicked acts which Henry committed in order to change his wife. After living for about twenty years with his wife, CATHERINE OF ARAGON, he divorced her, and married ANNE BOLEYN. When he had been married to ANNE BOLEYN for about six years, he caused her to be beheaded, and married one of her maids, named JANE SEYMOUR. The next year (1537), this queen died; and in the year 1540 he married ANNE OF CLEVES, before he had seen her. On the arrival of his new wife in England, however, he was so displeased with her appearance that he would not have her. He found, too, that she could only speak Dutch, of which language he was quite ignorant: so he lost all patience; he swore that she was "a great Flanders mare," and he turned her off.

Henry had thus married Anne of Cleves without seeing her, by the advice of Cromwell, who had showed the king a picture of her, in which she appeared more beautiful than she really was. The disappointed Henry was so angry that he determined to get rid of his wife and his minister at the same time. The "Vicar-general" Cromwell was therefore served in the same way as his master, Cardinal Wolsey, would have been had he lived. On 28th July, 1540, about two

years after the robbery of the monasteries, Cromwell was put to death by his fellow-robbler, Henry. He was accused of high treason, and condemned and executed without a trial, which was just what he had caused to be done to many others before him. A month or two after Cromwell's death, Cranmer divorced the king from Anne of Cleves; Henry gave her £3,000 per annum as a compensation, and she lived in England for sixteen years afterwards.

As soon as Henry had beheaded Cromwell and divorced Anne, he married another wife, named CATHERINE HOWARD. She, however, proved to be really a bad woman; and after she had been queen eighteen months Henry caused her also to be beheaded.

The next lady whom Henry married was named CATHERINE PARR. She offended Henry by arguing with him rather boldly in favour of the Reformation; and he therefore determined to put her to death also. Catherine, however, was a prudent woman. She apologised to the king, who pardoned her, and she was thus spared to outlive him.

Henry's last days were dreadful to himself and to all around him. He had become very corpulent, and was afflicted with an ulcer in the leg; thus he sometimes became as furious and cruel as a wild beast. He suspected all people to be his

enemies, and put numbers to death on the slightest pretences; few ventured into his presence without trembling. The last objects of his cruelty were the Duke of Norfolk, and his son, the Earl of Surrey. The latter was executed, but Henry happened to die the day before that appointed for the Duke of Norfolk's death; thus his life was spared. Henry's death happened in the year 1547. The date is worth remembering, as it is the year after the death of the great reformer, *Martin Luther*, which happened in 1546.

By repeating their names you will find that Henry had six wives, viz.:—

Catherine of Arragon,
Anne Boleyn,
Jane Seymour,
Anne of Cleves,
Catherine Howard, and
Catherine Parr.

By the first wife he had a daughter, named *Mary*, who, as her father and mother were Papists during her childhood, was brought up as a Papist. Henry's second queen had a daughter named *Elizabeth*, who became a Protestant; and his third queen, Jane Seymour, had a son, who was named *Edward*. He also was a Protestant, and he succeeded his father.

There were many social events in the time of Henry which are well worth relating. You shall hear of them next week, when we will make up the lesson.

THE ENGLISH TRAVELLER.

LONDON—THE ANCIENT BUILDINGS.

"MY DEAR CHILDREN,

"We enjoyed our visit to St. Paul's. We saw the monuments and body of the cathedral, the whispering-gallery, the ball, the library, the geometrical staircase, the great bell, the clock, and the vaults. The whole expense of seeing these places used to be 4s. 4d., but lately the authorities have learned to charge much less for admission. The lower part of the cathedral may be seen without paying any fee.

"I should tell you that we were not pleased with the outside view of the building; some parts are very 'grimy,' being covered with the soot of the London smoke; while the parts which are exposed to the weather are quite white, so poor St. Paul's has a piebald appearance. It is also so closely hemmed in by the surrounding buildings, that only a small part can be seen at one time.

"A long description of our visit would, I think, weary you. Instead, therefore, I will give you something of the history of this famous building from a book which my friend bought for me.* I will just alter a few of the words at sentences, to make them a little easier for you to understand.

"St. Paul's is situated at the top of Ludgate Hill, near the highest ground in London.

The old building, before the fire of London, was often called 'The *Eastminster*,' to distinguish it from *Westminster*, or Westminster Abbey, as we call it. Hear what our book says about the old St. Paul's:—

"Long before the Reformation, old St. Paul's was renowned for its embellishments. Massive basins of gold, silver candlesticks, silver crosses, gold cups, and other most costly ornaments, sparkled on its altar.

"In front of the cathedral stood the famous Paul's Cross, a wooden pulpit in which the most eminent divines preached every Sunday forenoon. For many years the old cathedral was a place of common resort and a general thoroughfare. The chapels and chantries were turned into workshops for mechanics, who pursued their business during Divine service. The vaults were made wine-cellars; shops and houses were built against the outer wall of the cathedral, and even "a play-house" is said to have disfigured the exterior. The very first lottery ever known in England, was drawn at the western entrance of the cathedral in 1569. It consisted of 40,000 tickets, and the drawing continued day and night from the 11th of January to the 6th of May. At last the great fire of London put a stop to these abominations, consuming in a

* Adams's London Guide.

few hours the splendid pile and its adornments.

"The important task of rebuilding the cathedral was confided to Sir Christopher Wren, who found the removal of the colossal walls, in many places standing eighty feet in height, and five in thickness, a colossal undertaking. On the 21st of June, 1675, the first stone of the new cathedral was laid. It was not until 1710, when Wren was 78 years old, that his son placed the highest stone of the lantern on the cupola. The cathedral stands upon two acres and sixteen perches of ground. Its entire length from east to west, is 510 feet; its breadth from north to south, 286 feet; the circuit of the entire building 2,292 feet; and the height to the summit of the cross, 404 feet. Notwithstanding it was thirty-five years building, it was finished by one architect and under one prelate, Henry Compton, Bishop of London.

"St. Paul's is said to have been copied from St. Peter's, at Rome; and to some extent this is true. It is not, however, so large. St. Peter's, the principal Catholic Cathedral, is the largest in the world; and St. Paul's, the principal Protestant Cathedral, is the next in size. St. Peter's was not, like St. Paul's, begun and finished by one architect, and under one prelate; no fewer than nineteen architects were employed upon it, and nineteen Popes sat in the Papal chair during the time of its erection, which lasted 145 years!

"St. Paul's would have been a much finer building than it is now, had its talented architect been allowed to carry out his own plans; but his employers forced him to deviate from them, from the absurd notion that they differed too much from those of other Cathedrals.

"The interior of St. Paul's is striking and impressive. It is so spacious that it has been considered to have a naked appearance. Lately, therefore, monuments of eminent individuals have been erected at the public expense. The most remarkable are those of Lord Nelson, Abercrombie, Earl Howe, John Howard, Dr. Johnson, Sir Wm. Jones, Sir Joshua Reynolds, and others. Over the entrance to the choir there is a plain marble slab, with an inscription in Latin, more remarkable than any of the rest. When translated it reads,—

"BENEATH LIES SIR CHRISTOPHER WREN, THE BUILDER OF THIS CHURCH AND CITY, WHO LIVED UPWARDS OF NINETY YEARS; NOT FOR HIMSELF, BUT FOR THE PUBLIC GOOD. READER, SEEKEST THOU HIS MONUMENT? LOOK AROUND!"

"HE DIED ON THE 25TH FEBRUARY, 1723, AGED 91."

"After our visit to St. Paul's, we went to view the other and more ancient cathedral, Westminster Abbey, of which you shall hear shortly

**"From your affectionate friend,
"HENRY YOUNG."**

ETYMOLOGY.

CHAPTER III.

THE INFLECTIONS OF THE PARTS OF SPEECH—NOUNS AND PRONOUNS.

Lesson 15.

THE PERSON OF NOUNS AND PRONOUNS.

Ion. Let us recapitulate the last lesson.

Nouns in the *nominative case* are known because they answer to the question which you can make with *who* and the verb. They are generally placed before the verb—as, *Mary struck John*.

A Noun is in the *objective case* when the action of the verb passes on to it; so it is generally placed after the verb—as, *John struck Mary*. Mary is thus said to be “governed” in the objective case by the verb *struck*.

Nouns are also governed in the objective case by prepositions. For instance:—*John was struck by Mary*. Here Mary is governed in the objective case by the preposition *by*.

P. Let us learn about the persons of pronouns. The pronoun *I* represents the person who speaks; so it is said to be of the *first person*. The pronoun *thou* represents some person spoken to; so it is said to be in the *second person*. Here are some other pronouns. I see *him*, I see *her*, I see *it*. Do I speak to the persons him, her, and it?

L. No; you speak about them, or of them.

P. And those pronouns which stand for some person spoken

of are said to be in the *third person*.

You may easily see which are the first, second, or third persons in the *plural* number, by comparing them with the *singular* pronouns. Thus, when one person speaks, he says *I*; when two persons speak, they say *we*.

When one person is spoken to, we say *thou*; but when we speak to two persons, we say *you*.

When we speak of one person, we say either *he*, *she*, or *it*; but when we speak of two persons, we say *they*.

L. I suppose, papa, that nouns, as well as pronouns, have different persons. Take the noun “John.” John may speak, or he may be spoken to, or he may be spoken of.

P. Yes; but “person” belongs more particularly to pronouns than to nouns. A noun can only be used in the first person when it is joined to a pronoun. I will give you instances of nouns in different persons. Thus—

SINGULAR.

(First person)—I, JOHN, am coming.

(Second person)—JOHN, come here!

(Third person)—Here comes JOHN.

PLURAL.

(*First person*)—We, the SOLDIERS, are marching.

(*Second person*)—SOLDIERS, march!

(*Third person*)—The SOLDIERS are marching.

I told you, however, that it is difficult to use a noun in the first person; it can only be used in connection with its pronoun.

You cannot say, "John am coming," but you may say, "I,

John, am coming." I is the word we really use as the nominative.

In the following parsing exercise you may change the person of the nouns and pronouns in each sentence. If they be in the first person, write the sentence with the noun and pronoun in the second or in the third persons. The sentences in the second or third persons may also be changed to the first person.

No. 15. PARSING EXERCISE.

(*Change the person of the nouns and pronouns in the following sentences:*—)

(*Singular Number*)—I, the king, am very happy. How miserable art thou, O man! Puss! come thou to me! Look at the glorious sun, how he dispenses mists. Here is James; he is looking very well.

(*Plural Number*)—We, the regular dustmen, have called for our Christmas-box. You, the rulers of the nation, should not spend your time in trifling. Here are the beggars; they will not go away without money. Move on! you destroyers of my domestic comfort.

Lesson 16.

THE DIFFERENT INFLECTIONS OF NOUNS FOR GENDER.

P. Mention the genders of nouns.

W. The masculine, feminine, common, and neuter genders.

P. You learned the "definitions" of these genders; we may notice the different ways in which they are formed.

Give me the feminine gender of each of these nouns—Boy, uncle, lion, poet, hero, manservant, he-goat, peacock.

Ian. The feminines are—Girl, aunt, lioness, poetess, heroine, maid-servant, she-goat, pea-hen.

W. The first two feminines

were formed by changing the word.

Ian. The second two were formed by adding the syllable *ess*; and hero was formed by adding the syllable *ine*.

P. We call such a syllable a termination.

L. In the others you either placed a word before, or placed one after the masculine noun.

P. Thus, we have three ways of forming feminines.

(1.) By changing the word—as, *boy, girl*.

(2.) By adding a termination—*ns, canut, countess*.

(3.) By prefixing or suffixing another word—as, *cork-sparrow, hen-sparrow; pea-cock, pea-hen*.

In many words you do not

add *ess* simply, but the masculine word is changed before it is added. Thus, the feminine of *duke* is not *duke-ess*, but *duch-ess*. Again, for the female of *lad*, we do not say *lad-ess*, but *lass*. In the word *tiger* and many others we drop the last vowel in making the feminine—thus, *tiger*, *tigress*.

I will give you three lists of masculine and feminine nouns, which you may commit to memory. There are of course many others besides those in the lists, but I have only given you such as you are not very familiar with.

List 1. GENDERS FORMED BY CHANGING THE WORD.

Male.	Female.
Bachelor.	Maid.
Bear.	Sow.
Boy.	Girl.
Brother.	Sister.
Burk.	Doe.
Dog.	Bitch.
Denko.	Duck.
Earl.	Countess.
Gander.	Goose.
Hart.	Roe.
Horse.	Mare.
Lad.	Lass.
Lord.	Lady.
Master.	Mistress.
Nephew.	Niece.
Ram.	Ewe.
Sloven.	Slut.
Sing.	Hind.
Wizard.	Witch.

List 2. GENDERS FORMED BY ADDING OR CHANGING THE TERMINATION.

Male.	Female.
Abbot.	Abbess.
Actor.	Actress.
Ambassador.	Ambassadorress.
Baron.	Baroness.

Male.	Female.
Bridegroom.	Brid.
Benefactor.	Benefactress.
Conductor.	Conductress.
Count.	Countess.
Duke.	Duchess.
Emperor.	Empress.
Executor.	Excentrix.
Governor.	Governess.
Heir.	Heiress.
Hero.	Heroine.
Hunter.	Huntress.
Host.	Hostess.
Jew.	Jewess.
Laudgrave.	Laudgravine.
Lion.	Lioness.
Marquis.	Marchioness.
Mayor.	Mayoress.
Patron.	Patroness.
Peer.	Peeress.
Poet.	Poetess.
Priest.	Priestess.
Prince.	Princess.
Prophet.	Prophetess.
Protector.	Protectress.
Shepherd.	Shepherdess.
Songster.	Songstress.
Sorcerer.	Sorceress.
Sultan.	Sultana.
Tiger.	Tigress.
Traitor.	Traitress.
Tutor.	Tutorress.
Viscount.	Viscountess.
Widower.	Widow.

List 3. GENDERS FORMED BY PREFIXING OR AFFIXING A WORD.

Male.	Female.
A cock-sparrow.	A hen-sparrow.
A man-servant.	A maid-servant.
A he-goat.	A she-goat.
A he-bear.	A she-bear.
A male child.	A female child.
Male descendants.	Female descendants.

There is one thing more to be noticed concerning the gender of nouns. Many things which have not life, and are of course neuter, are often said to

be masculine or feminine. You are to change the gender. When we speak of the sun, we of the nouns in each sentence, say *he* shines; and of the moon, When there are masculine we say *she*; many other neuter nouns, *read the sentence* with names are thus spoken of. In the same nouns in the feminine the following parsing exercise gender.

No. 16. PARSING EXERCISE.

The *bachelor* bought a *boar*, and paid a *boy* to drive it to the *house* of his *brother*. The fine *buck* was killed by the *dogs* of the *Earl* of Norfolk. A *duck*, a *goose*, and the *roe*, were presented to the *husk* who is the Earl's *wife*, and to the *bully* who was the *mistress* of the *hunting*. A fine *roe* and a *head* were carried off by some *slat*, whom we thought to be a *witch*.

The *abbot*, and a *baccon*, were sent as *ambassadors*. They were bad *actors*, and they failed. The *cavall*, the *duke*, the *elector*, and the *governor* were *balegeous*, and the *conductar* of the marriage ceremony was their *beaufactar*. The *jerress*, the *queerress*, the *terrene*, and the *hantress* were the *beadles*; they all dined at the house of the *landgrave*, who was their *host*. The *Jere* the *magor*, his *patron* the *marquis*, and another *peer* would have been *balegeous*, but neither the *priestress*, the *prophetess*, the *shepherdess*, nor the *princess* would be their *brides*. The *poet* sang about the *lion*, his *protector*, but he was a bad *songster*. The *sorceress* was the *tutoress* of the *tiger*, but he was a *traitor* and killed his *mistress*. Here come the *reudors* of the *sultan* and the *riscount*.

Our *maiden-servant* killed a *cock-sparrow*, a *she-goat*, and a *she-bear*. She is a *female child*.

MUTUAL LOVE.

CHILDREN who in peace are living,
Kindly bent on mutual love,
Are to parents pleasure giving;
Are a sweetmeat sweet to God:
Still with love their hearts are glowing,
Still in bliss their lives are flowing.

Careful to avoid contention,
Studious, too, of friendly deeds;
Always giving due attention
To the path where virtue leads;
Every error promptly bearing;
Never parents' bosoms grieving.

Children who are thus pursuing
Paths of peace and mutual love,
God with smiles is ever viewing,
And the worthy will approve.
Such to parents are a treasure,
Life with them is always pleasure.

EXCELSIOR.

The shades of night were falling fast,
As through an Alpine village passed
A youth, who bore, 'mid snow and ice,
A banner with the strange device,
Excelsior!

His brow was sad; his eye beneath
Flashed like a falchion from its sheath,
And like a silver clarion rang
The accents of that unknown tongue,
Excelsior!

In happy homes he saw the light
Of household fires gleam warm and bright;
Above, the spectral glaciers shone,
And from his lips escaped a groan,
Excelsior!

"Try not the pass!" the old man said;
"Dark lowers the tempest overhead,
The roaring torrent is deep and wide!"
And loud that clarion voice replied
Excelsior!

"O stay," the maiden said, "and rest
Thy weary head upon this breast!"
A tear stood in his bright blue eye,
But still he answered, with a sigh,
Excelsior!

"Beware the pine-tree's withered branch!
Beware the awful avalanche!"
This was the peasant's last good-night;
A voice replied, far up the height,
Excelsior!

At break of day, as heavenward
The pious monks of Saint Bernard
Uttered the oft-repeated prayer,
A voice cried through the startled air
Excelsior!

A traveller, by the faithful hound,
Half-buried in the snow was found,
Still grasping in his hand of ice
That banner with the strange device,
Excelsior!

There, in the twilight cold and gray,
Lifeless, but beautiful, he lay,
And from the sky, serene and far,
A voice fell, like a falling star,
Excelsior!

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

12th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO MADE A POWER-LOOM (*Continued*).

P. I told you last week that Dr. Cartwright took out his second patent in the year 1787.

From that time he persevered in making looms, and these surprised the public as much as the spinning-jennies had done, by the quantities of cloth they wove. In his progress Dr. Cartwright met with all kinds of difficulties, and made many more failures, but nothing disheartened him now. It is said that he had the proper spirit for an inventor, for he looked upon all difficulties with pleasure, because they gave him occasion for more triumphs. When he had brought his first loom to perfection he was visited by a manufacturer, who was much astonished at it.

L. Perhaps it was one of the Manchester gentlemen who had argued with him when he was at Matlock!

P. Perhaps so. The gentleman said to him, "You have wonderful mechanical skill, Dr. Cartwright, but there is one thing that would certainly baffle you."

"What is that?" was the reply.

"You could not," said the manufacturer, "weave patterns

in checks; that is too difficult to be done."

Dr. Cartwright did not make any observation. I suppose he had learned to be quite sure before he opened his mouth to speak; but when the manufacturer had gone, he tried to accomplish the thing. The consequence was, that on receiving a second visit from the same person, he had the pleasure of showing him a piece of muslin, of the description mentioned, beautifully executed by his machinery. The man, it is said, was more amazed at this sight than he had been before. He declared to his friend that he must have called in some agency more than human to assist him.

After taking out his patent, Dr. Cartwright tried to establish a large factory of power-looms at Doncaster, but he failed; he afterwards made many more attempts, and still failed; until he found that he had spent a large fortune.

One reason for his failures was that the cotton-yarn required "dressing" while being woven, and that the wages paid to the man required to dress the warp, lessened the profits gained by the loom.

The various *accidents* that beset Dr. Cartwright were another cause of failure. After he had built a large factory containing *five hundred* looms, it was burned to the ground either by accident or on purpose. Another reason for his non-success was, perhaps, that he was not sufficiently "business-like" to be careful of his own interest; by carelessness in business he lost many advantages. He also lost the advantages of his invention by the dishonesty of some manufacturers who copied it, and made machines which were slightly different from his, so that he could not prevent them from using them. But these practices could not have been carried on to any very great extent, for it is said, that the power-loom was not generally introduced into the cotton-manufacture until the year 1801, the very year when the Doctor's patent expired.

When Dr. Cartwright's machines thus became known, their merits were understood and felt. The merits of the inventor were also thought of; every one thought that it was very hard that a man who had done so much good should have lost his large fortune of many thousand pounds, and have received no reward. Accordingly, when the merchants and manufacturers of Manchester found what advantages the nation would gain by these looms, their good feelings towards him were awaked. A large meeting of the great Manchester men was held; they were all

personal strangers to him; but they all felt alike grateful. These men, therefore, presented a memorial to the Lords of the Treasury, in which they recomited his eminent services, and all his misfortunes, which you have heard of. Other applications to the Treasury were made in his behalf, and the consequence was that the Parliament granted him the sum of £10,000 soon after. Besides receiving this money, he received much honour from those who knew him, for he had the credit of inventing a machine which was as valuable a present to the industry of the country as that of Arkwright or Crompton. Thus, you see again, what a man can do if he will only try, and will persevere. He little supposed, when disputing at Matlock with the men of Manchester, that he himself would be the man to invent a machine which was declared to be an impossibility.

There is not much else to be said of Cartwright, except that when he had acquired a taste for mechanics and inventions, he "set his wits to work" in many different ways. He made valuable improvements in combing wool by machinery, in rope-making, and in other departments of manufacture. He also turned his attention to the steam-engine of Watt, which, you may remember, was brought to perfection during Cartwright's lifetime. He told his son that if he lived to be a man, he would see both ships and carriages driven by steam. At an early period he made a

model of a steam-engine which he attached to a barge. In the year 1793, he explained it to a friend named Robert Fulton, who afterwards brought steam-navigation to such perfection in America. Thus, he was one of the first originators of steam conveyances. Even in the year before his death, which took place in 1823, although he was just eighty years old, he was not only engaged in philosophical speculations, but he was busy in a plan to propel land carriages by steam.

Cartwright died at Hastings in his eighty-first year. Even a few years before his death he talked of "moving about in his farm, from eight o'clock in the morning until four in the afternoon without the least fatigue." He talked also of his cure for mildew in wheat; of his machine for dibbling wheat, which he had brought to great perfection; of his improvements for ploughs and wheel-carriages; and so on. Thus, he was active all his lifetime, even to the very end; all his moments were well used up.

You have now heard of the four most remarkable men of this country who improved the cotton manufacture. Hargreaves, Arkwright, and Crompton were the improvers of spinning, and Cartwright of weaving. It is good to remember these men. Next time you go with your mamma to the draper's shop, when you see the young man who serves her get down the Scotch cambrics and

muslins, and point out to your mamma that they "are beautifully fine," you may say to yourself, "Thank Simeon Crompton and his *mule* for that." And when you see all kinds of calicoes, and sheetings, and twills, and dimities, and counterpanes, brought forth, and you hear the man who sells them say, "Wonderfully cheap," then you may think to yourself, "Thank Cartwright and the others for that."

The history of the cotton-trade, and of the men who are engaged in it, will always be an interesting and important study. It is *interesting* for the perseverance of the men who have been, and are, engaged in it. And these men seem to have provoked one another on to greater improvements. At first, not enough cotton was spun for the men to weave; but a machine is invented, and soon there is more cotton-yarn prepared than the weavers can use. Then weaving-machines are invented, which, if there were enough of them, would weave more than the spinning-machines could prepare. This has the study of this manufacture become *important*, for, as you have heard before in one of Mr. Young's letters, how much cotton is spun every year. A long time ago, it was said the cotton-yarn spun annually in England would, in a single thread, girdle the globe 203,775 times; or it would reach from the earth to the sun (95,000,000 miles) fifty-one times!

So much for the growth of the cotton-manufacture!

CHAPTER II.

THE PARTS OF A PLANT—THE LEAF (*Concluded*).

P. Before you write your memory lesson on a leaf, there are one or two more points to be noticed.

We have heard of the organs, functions, position, sizes, shapes, and appendages of leaves; you may lastly notice their *duration*.

L. Yes, some leaves fall off much sooner than others.

W. And in some trees the leaves are green all the winter.

P. We call such trees evergreens. Leaves, then, like roots, have been arranged, according to their duration, into three classes. Thus, those which fade soon after they appear, are called *fugitive*.

Those which fall in the autumn are called *deciduous*; and

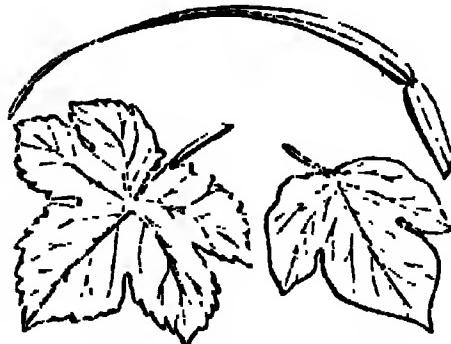
Those which do not fall off until other new leaves make their appearance, are called *evergreen*.

And that is all I have to say on the leaves of Exogens.

Ion. But we have not yet had a lesson on the leaf of an Endogen, papa!

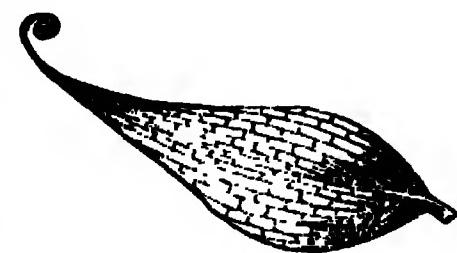
P. No; it will only be necessary to point out the principal difference between such a leaf and that of an exogen. In the leaves of endogens the ribs are always straight. In this drawing you have the leaf of the well-known endogen grass, which has only one straight rib—in the three-ribbed leaf of ivy the veins run in all directions;

while in the vine-leaf, which is five-ribbed, the veins also are irregular.



W. But have not the endogens more than one rib in each leaf?

P. Yes; some have many ribs. Here is one; you observe



that the petiole is not continued through the centre of the leaf so as to form a midrib.

L. No; it divides into several veins which run along side by side from one end of the leaf to the other; they are nearly parallel to each other.

P. When lines are drawn lengthways we call them "longitudinal"—thus, we may say that the leaves of endogens have veins which are *longitudinal* and *parallel*.

W. Instead of forming a

net-work as the veins of exogens do.

P. Next time you go into the garden you may observe these veins in the leaves of the lily, flag, and others. If you tear one, it will tear in long strips or ribands. You may tear a leaf into several such narrow strips; and as each will have its own vein, or rib, it will perform its functions almost as well as before.

The leaves of the great endogens, the *banana* and the *plantain*, are often slit up in this way by the violent winds of tropical climates.

You may now write your memory lesson.

Memory Lesson 3. THE PARTS OF A PLANT—THE LEAVES.

1. The leaves of a plant are flat expanded green bodies, growing upon the stem. In order to give an account of them, we must notice their parts, functions, position, size, shape, appendages, and duration.

2. The principal parts of the leaf of an EXOGEN are, the petiole and the blade, which contains a midrib, veins, skin, tissue, cells, and stomata.

3. The principal FUNCTIONS of the leaves are to expose the thin (crude) sap to the air, to exhale a portion of the water, and to inhale the carbon from the carbonic-acid gas in the atmosphere. They thus elaborate, or digest, the sap, and render it fit

to nourish the various parts of the plant. The leaves of the AIR-PLANT and PITCHER-PLANT have very peculiar functions.

4. The POSITIONS of the leaves on the stem are various: some are said to be "alternate," others are "opposite," and others are "whorled." The point at which the leaf joins the stalk is called a "node," the spaces on the stem between the nodes are called "internodes."

5. Leaves vary very much in SIZE; some are so small as scarcely to be seen by the naked eye, while others grow even to the length of forty feet.

6. The SHAPES of leaves are as varied as their sizes. They may be arranged into simple and compound. The different names given to the simple shapes are too numerous to be mentioned; the principal compound shapes are, the ternate, pinnate, bi-pinnate, tri-pinnate, &c.

7. There are many appendages to leaves, such as hairs, stings, prickles, stipules, and tendrils.

8. Leaves, like roots, may be classified according to their duration. Thus we have fugitive, deciduous, and evergreen leaves.

9. The leaves of ENDOGENS differ from those of exogens in many of the foregoing particulars. Their veins do not form a network, they have no midrib, but the petioles divide into numerous straight veins, which are longitudinal and parallel. The manner in which the leaves grow from the stalk is also different from that of exogenous leaves.

THE TUDORS.

THE SOCIAL EVENTS OF THE TIMES OF HENRY VIII.

P. The greatest social event of Henry VIII.'s reign was the *Reformation*, of which you have already heard something. The inventions which added to the social *comforts* of the people are worth noticing.

In this reign *Pins* were introduced into England from France by the Queen, Catherine Howard. They were at first very expensive, and were considered a luxury. It is said that ladies used to receive an annual sum of money from their husbands to purchase their pins; and that a lady's pocket-money has since been called "pin-money." Before pins were invented, the ladies' dresses were fastened with ribbons, loops, laces, clasps, and wooden skewers.

Cotton thread was another useful invention of this reign.

Another invention was the *spinning wheel*, by Jürgen, a German; it has since been greatly improved by Sir Richard Arkwright, in the reign of George III.

The *dress* of the people was worthy of notice. The courtiers were dressed very much like the Beef-eaters seen in the present day; they wore showy clothes, full of red and yellow stripes, and stuffed them out to make themselves look as big as the king. The shoes worn, were like those of people who have the gout, measuring twelve to fourteen inches across the toes.

Several *new articles of food* were introduced in this reign. The number of Protestants of Flanders and other countries, was very great; they fled here from the persecutions by the Catholics at home. Their number was so great that the workmen and apprentices of London made an insurrection, declaring that they were starved by the foreigners, who took the work out of their hands. The men of Flanders were much better gardeners than the English, for when Queen Catherine required a salad, she used to despatch a messenger to Flanders to procure it. The Flemish gardeners introduced *hops*, and taught the English how to grow them. They also brought over *carrots* and several other vegetables. The principal new things were imported in the year 1525, so that the people made this fine rhyme—

"Turkeys, carps, hops, pippins, and
beer,
Came into England all in one
year."

Grocers' *currants*, or *Corinths*, as they were called, because they are Corinthian grapes, and several sorts of plums, were afterwards introduced in the year 1532. In 1540, *cherries* were first planted in Kent; and *apricots* were brought over by the king's gardener.

The *damask rose* and the *musk rose* were first grown in England during this reign.

W. You have told of several new articles of food, papa; please, let me count them —hops, carrots, salads, and several vegetables, pippins, carps, turkeys, and beer, currants, plums, cherries, and apricots.

P. There was also an improvement in the supply of water in this reign. In London, *leaden* conduits were substituted for the old wooden ones, which were inconvenient. Indeed, many improvements were made in the social comforts and in the civilization of the people during this reign. This was a natural consequence of the measures which Henry VII. adopted to increase the people's liberty and importance. I told you, that there were no longer any of the order of "villeins" after the reign of Henry VII.; so also, after the reign of Henry VIII., there were scarcely any more bondsmen or thralls. Slavery and Popery, the two last and worst remnants of the Ferial System, were checked during this reign.

Another change worth noticing is, that the *pound* was also called a *sovereign*. Henry's treatment of the coin was very disgraceful. Notwithstanding the immense wealth he gained by robbing the monasteries, his extravagance was such that he was always poor. To increase his riches he cheated the public most shamefully, by debasing the coin. He "called in" all the sovereigns; and, melting them down, he alloyed the gold with copper, in order to coin

more sovereigns with it. He treated the silver money in the same way, so that the shillings of his reign were afterwards sold for tene pence, nine pence, and even six pence a-piece. It seemed as if Henry wished to hide his dishonesty of character in sounding titles. Not content with being styled "The Head of the Church," he caused himself to be addressed by the title "Your Most Gracious Majesty," instead of "Your Highness," or "Your Grace."

The number of new offices, institutions, and buildings in this reign is worthy of notice. Soon after the dissolution of the monasteries six new bishops were appointed, viz., the Bishops of Bristol, Chester, Gloucester, Oxford, Peterborough, and Westminster. The first *Secretary of State* was also appointed. The order of *Jesuits* was founded by the Roman Catholics abroad. The name *Protestants* was also first adopted by the Reformers.

The two principal colleges in the Universities, *Christchurch College*, at Oxford, and *Triality College*, at Cambridge, were founded in this reign. The *College of Physicians* was also established in 1528. The palaces of *Hampton Court* and *Whitehall* were built by Wolsey; one of the religious houses, an old hospital for women with the leprosy, was made into a palace for the king, and was called *St. James's Palace*.

The eminent men of this reign were numerous. Cardinal Wolsey, Sir Thomas More,

Archbishop Cranmer, and the Vicar-general Cromwell, you have heard of. All may be said to have died violent deaths. Cardinal Wolsey either died of grief or poisoned himself; but for that, he would perhaps, as I told you, have been beheaded. More and Cromwell were executed; and of Cranmer's violent death you will soon hear.

Dr. John Cale, an eminent scholar, and founder of St. Paul's School, was also celebrated. So also were *Miles Coverdale* and *William Tindal*, the translators of the first English bible. Tindal was betrayed to the Emperor of Germany by Henry VIII., and was burned. His last words were, "Lord, open the King of England's eyes."

The most famous men of foreign countries were four divines, *Luther*, *Cajetan*, *Saciens*, and *Erasmus*, whose lives you may one day read. Besides these, *Ignatius Loyola*, the founder of the order of Jesuits; the celebrated *Gustavus Vasa*, King of Sweden; *Copernicus*, the astronomer of Prussia, who discovered that the earth moved round the sun, and was imprisoned by the Inquisition for saying so; *Leonardo da Vinci* and *Raphael*, the famous Italian painters; and *Albrecht Dürer*, the famous German painter, were all men of those times, and are worthy to be remembered.

Lesson 31. HENRY VIII.

Began to reign . . . 1509. •
Died 1547.

1. *Henry VIII. was the son*

184

of Henry VII., and the second king of the Tudor Family.

2. *On his ascending the throne his pleasing manners and person were a contrast to those of his father; but Henry soon fell into bad ways. The people found him to be as extravagant as his father was mean, so that he soon spent the vast sum of money which had been saved. His wars with France and Scotland, and afterwards his peaceful amusements at "tilt and tourney," were very expensive.*

3. *In procuring these sums of money Henry was assisted by a favorite, named CARDINAL WOLSEY, whose extravagance was almost equal to that of the king. This man, nevertheless, forced the people to yield sufficient money for the desires of himself and his master.*

4. *Henry at length quarreled with his friend Wolsey, and with the Pope, concerning the divorce of his wife Catherine. Wolsey was succeeded in favour by CRANMER and THOMAS CROMWELL, who raised immense sums of money for the king, by suppressing the monasteries and religious houses of England; the king also increased his wealth by the mean practice of debasing the coin.*

5. *The principal events of Henry's reign are his quarrel with the Pope, the Reformation, and the translation and reading of the Bible. The less important events are, the king's marriages with six different wives; the rise and fall of Wolsey and Cromwell, both of whom lost favour when the king changed his wife; the rise of Cranmer; and*

the execution of Sir Thomas More. The improvements in civilisation, the introduction of new articles of food, the new institutions and buildings, and *the eminent foreigners during this reign, are also remarkable.*

6. Henry VIII. died in the year 1547, after a tyrannical reign of nearly 38 years.

BE KIND.

Be kind to the young—in thy youth's merry day
 Thou too hast been thoughtless and vain ;
 Oh ! plant not a thorn in the flower-strewn way,
 That may never be trodden again.
 Enough of them yet in the pathway of life,
 If they travel it long they will find ;
 But dim not bright youth with the shadow of strife ;
 Be kind to the youthful—be kind.

Be kind to the aged—not long at thy side
 Hath the travel worn-pilgrim to stay ;
 The frail thread of life will be shortly untied,
 He is passing—soon passing away.
 Oh ! let him not deem that when summoned from earth,
 He will leave but cold feelings behind ;
 Give him still a warm nook of thy heart and thy hearth ;
 Be kind to the aged—be kind.

Be kind to the simple—although the full light
 Of genius to thee may be given,
 Yet look not with scorn, in the pride of thy might,
 On a brother less favoured by heaven.
 He is not to blame if the God-given ray
 Hath but faintly illuminated his mind ;
 Thine own may be quenched by a cloud on the way ;
 Be kind to the simple—be kind.

Be kind to the erring—full many a heart
 Unkindness hath driven astray,
 But the breath of reproach may but sharpen
 That first sent it out of the way.
 Ye would not insult with a gibe or a sneer
 The maimed, or the halt, or the blind ;
 But the ills of the spirit are far more severe ;
 Be kind to thy fellow—be kind.

Canada.

R. A. P.

THE ENGLISH TRAVELLER.

LONDON—THE ANCIENT BUILDINGS.

"**MY DEAR CHILDREN,—**

"'WESTMINSTER ABBEY,' said my friend, 'deserves a careful and close examination; it is perhaps more interesting than either the Tower, or St. Paul's.'

"'Certainly its venerable exterior is very interesting,' I replied. 'Oh! how beautiful is the tracery of the windows; look at the crumbling, crocketed spires, the turreted buttresses, and the lofty pinnacles. How grand are these two gigantic western towers!' But I need not attempt to describe the exterior to you; it is another of those buildings which must be *seen* to acquire an idea of their beauty.

"'The interior is far more worthy of your attention than the outside,' said my friend. 'Before we visit it I may tell you that the whole building is, like the other cathedrals, in the form of a cross, but, cloisters and numerous chapels around it interfere much with its shape. Its length is 375 feet; breadth, 200 feet; greatest height, 142 feet.'

"'The building is said to have been founded by Sebert, King of the East Saxons, in 616. The spot of ground on which it was built was then a small island surrounded by the river Thames. It was afterwards enlarged and rebuilt by EDWARD THE CONFESSOR, HENRY III., HENRY VII., and SIR CHRISTOPHER WREN.'

HENRY VIII. took possession of a large portion of its revenue, converted the Abbey into a cathedral, and formed Westminster into a city.

"'But let us enter,' said my friend, and accordingly we found ourselves in the part called *Poets' Corner*. Here we waited until two or three more visitors arrived to make up a party, and we were then conducted round the building by a verger. Our guide pointed out to us the monuments of the famous ADDISON; of the actor GARRICK; of the musician HANDEL; of the poets GOLDSMITH, GAY, THOMSON, SHAKESPEARE, SOUTHEY, GRAY, SPENSER, MILTON, CAMPBELL, DRYDEN, and others.

"From the Poets' Corner we passed into the chapel of St. Edmund, the chapel of St. Nicholas, and the most magnificent chapel of Henry VII. This place, like the whole of the building, it is useless to attempt to describe; it has been called the wonder of the world; and there is not, perhaps, a nobler specimen of architecture. King Henry lived to see the building nearly completed, and was buried in the sumptuous tomb which he had prepared for his remains. The chapel not only contains Henry's own tomb, but that of his grandson, Edward VI. There are there, also, the monuments of the murdered

princes, Edward V. and his brother, whose remains were, you may remember, discovered in the Tower. In another part is what is called 'The Royal Vault,' which contains the remains of Charles II., William III. and Mary, and Queen Anne. In another part are remains of King George II. and Queen Caroline, the father of George III., and the Duke of Cumberland, famous for his victory at Culloden, in 1745.

"The next chapel is that of St. PAUL, which contains the colossal statue of Mr. James Watt, erected at the cost of £6,000.

"The chapel of EDWARD THE CONFESSOR is, perhaps, the most *interesting* of all. Around the magnificent mausoleum of the Confessor are the tombs of EDWARD I., HENRY III., QUEEN ELEANOR, HENRY V., QUEEN PHILIPPA, EDWARD III., and RICHARD II.

"After lingering over these tombs we proceeded to the chapels of St. ERASMIUS, and of St. JOHN THE BAPTIST. We also visited the NORTHERN TRANSEPT, where we saw the monuments of the EARL OF CHATHAM, SIR ISAAC NEWTON, and of the most celebrated musicians.

"Leaving the Abbey we inspected the CLOISTERS, and the CHAPTER HOUSE, where the House of Commons held their parliaments until the reign of EDWARD VI. In this place the public records are now deposited; amongst them is the original *Doomsday Book*, now

nearly 800 years old. Near the Chapter House the ALMONRY formerly stood, in which place the first book was printed in England by William Caxton, A.D. 1474.

"In the neighbourhood of Westminster Abbey we found many other interesting places. The principal were WESTMINSTER SCHOOL, renowned for its antiquity and learning, for it was founded at the close of the 11th century, and it numbered among its pupils, Dryden, Wren, Locke, and Southey.

WESTMINSTER HALL is another ancient and famous place; it is the centre of the "superior" law courts. It was originally a palace, built by William Rufus, and altered by Richard II. The Hall is said to be the largest, unsupported by pillars, in the world, being 290 feet long, 68 feet broad, and 90 feet high. Within these walls King Charles I. and many nobles were tried and condemned to death; and within these walls, also, many a coronation banquet and merry feast have been held.

"On the other side of the river, opposite Westminster Abbey, is LAMBERT PALACE, which, for more than 650 years has been the residence of the Archbishops of Canterbury.

"This was the last of the ancient buildings which we saw on the third day; therefore, dear children, I have only to add that

"I remain,
"Your affectionate friend,
"HENRY YOUNG."

ORTHOGRAPHY.

CHAPTER III.

THE INFLECTIONS OF THE PARTS OF SPEECH—NOUNS AND PRONOUNS.

Lesson 17.

THE DIFFERENT INFLECTIONS FOR NUMBERS.

P. To-day we will talk of the different ways of forming the *number* of nouns.

Here are some nouns in the singular number; give me their plurals.

Dog, box, coach, chair, lady, wife.

Ox, child.

Woman, goose, foot, tooth.

Sheep, deer.

W. In the first instances the plurals are made just by adding *s* to the singular—in some you add *es*; these are the most common ways, I think.

P. They are. You have not noticed that in the word lady the *y* is changed into *i*; thus instead of lady-es we have ladi-es. The same change is made in all nouns ending in *y* unless the *y* has another vowel before it. Thus, *dandy*, *dandies*; *Lucy*, *Lucies*; *daisy*, *daisies*; *fly*, *flies*. But in the following words the *y* is not changed,—key, keys; toy, toys; boy, boys; day, days. Why is the *y* not changed?

W. Because in each word there is another vowel before it.

P. Here are some more nouns which undergo a change. Thus, *loaf*, *loaves*; *calf*, *calfes*; *wife*, *wives*.

I. In these nouns the *f* is changed into *v* when they are made plural.

P. True; but we cannot say this of all nouns ending in *f* or *fe*; the plural of dwarf is dwarfs; of hoof, hoofs; of safe, safes; and so on. The nouns ending in *ff* also make their plurals without change—as, muffs, muss; stuff, stuffs, &c. I think that with a little consideration you may now make the first rule on the Number of nouns.

L. I will make it—

RULE 1. The most common way of forming the plural is *to add s to the singular*.

There are, however, exceptions.
(a.) Nouns ending in *y* with a consonant before it, change the *y* into *ie*—*ns*, *lady*, *ladies*; but those ending in *y* with a vowel before it, do not change—as key, keys.

(b.) Some nouns ending in *f* or *fe*, change the *f* into *v*—as, *loaf*, *loaves*; *life*, *lives*. But this is not the case with all—such as, *hoof*, *hoofs*; *stuff*, *stuffs*.

P. We will next notice the un-common ways of forming the plural. In the words ox, child, and brothers, the plurals are *oxen*, *children*, *brethren*.

W. I can make the second rule from those examples.

RULE 2. The plurals of some nouns are formed by adding *en* or *ren*.

L. But, papa, the word

brother has two plurals—for I call Willie and Tom my *brothers*.

P. True. The word brethren is the more ancient plural; perhaps it will one day be lost altogether. At one time there were many more words forming their plurals in this way; the plural of *cow* was *cow-en*; we have now altered the word to *kine*. Again, the plural of *sow* was *sowen*, which is now altered to *swine*.

Let us now look at the next examples. Woman, goose, foot, tooth, and mouse; the plurals are—women, geese, feet, teeth, and mice. What do you observe of these plurals?

L. That in each word the vowels are changed.

P. True; and in the words mouse and mice the *s* is changed into *c*—thus you may make the third rule.

RULE 3. Some nouns form the plurals by changing their vowels—*us, man, men; foot, feet.*

W. There are three other nouns which we have not yet noticed—deer, sheep, and fish. I can make the rule concerning them without any explanation.

RULE 4. Some nouns are the same in the singular and in the plural; thus we say one sheep, twenty sheep—a fish, a shoal of fish.

L. Before we finish, I want to introduce some new words.

P. Bring them in, then. Let us see them.

L. Here they are—

Cattle, people, alms, tongs, ashes, goods, riches.

Sun, mutton, beef, veal, wheat, iron, music, goodness, France, Constantinople.

The first are all plural nouns, find me their singular. The last are all singular nouns, find me their plurals.

W. I cannot do that; so it is easy to form the rule for such words.

RULE 5. Some words have a plural meaning, and cannot be used in the singular—such as, cattle, &c. Others, some of which are proper names, cannot be made plural—such as, the sun, France, &c.

P. It will be well for you to remember these rules; and in order that you may do so, I will give you some practice in another parsing exercise.

No. 17. PARSING EXERCISE.

'Change the number of every noun and pronoun you meet with in reading the following sentences:—)

The boy and his mother met a soldier on a horse. A lady picking a daisy, found a beautiful fly. My beautiful baby is a little fairy. I will buy this toy for my boy; it will increase his joy. His wife bought a knife, a loaf, and a calf. I saved thy life. Look at this muff.

The child is playing with the ox. She is going to feed the sow.

The heavy man trod on my foot; he also knocked out my tooth. Here is a sheep, and a fish. Here are some people driving cattle; they are afraid

they will be taken by the *military*. The *people* are at *Rome*. Look at the *sun*. These words—*Bee, butterfly, donkey, wolf, hoof, cuff, snr, ox, tooth, goose, louse, deer, salmon, beef*, are either the names of *animals*, or of a part of an animal, or of something procured from an animal.

P. We will conclude with another parsing exercise, on which you may use the knowledge you have acquired. You may mention the gender, number, person, and case of each noun and pronoun. I will parse the first sentence for you. Thus, *the horse*, the definite article. *Horse*, a common noun, masculine gender, singular number, third person, and nominative case to the verb “has hurt.” *Has*, a verb. *hurt*, a verb. *Tom*, a proper noun, masculine gender, singular number, third person, and objective case, governed by the verb “has hurt.”

No. 18. PARSING EXERCISE.

The *norse* [has hurt] *Tom*. *Mary*, you [have written] your copy badly. You [shall be punished] if you scribble again. Stir the fire with the little poker, or beat it down with the logs. Ah! slack! alas! oh dear! I cannot learn my hard lesson, but I will try again. Lo! I know it now.

TO A CHILD SIX YEARS OLD.

Six years, six happy years, have lit
The sunshine of thy brow;
And the bright clustering buds of joy
Are twining round it now.

Thy guileless heart dreams not of cares
Which coming years shall bring;
But thy light buoyant bosom
The world has yet to wring.

Yes, there are thorns, young dreamer,
Among earth's fairest flowers;
And clouds will sometimes shadow o'er
Life's brightest, sunniest hours.

Expect not perfect bliss, while here,
'Tis nowhere to be found;
Its accents fall upon the ear
With an unearthly sound.

The proudest schemes of human bliss
Dissolve and fade in air;
In heaven, it has its dwelling place,
Oh, seek and find it there.

AUGUSTA.

THE FOREIGN TRAVELLER.

ITALY.

"MY DEAR CHILDREN.—

"I am very tired to-night—very. Perhaps I am lazy, I can't say; but here I am, in Constantinople still, and I am not inclined to go away. The countess has gone, and also the dragoman of the ambassador. I never see him now, nor anybody else that I know; but I am quite content with seeing the sun, and the Bosphorus, and the glittering city. Dirty as the city is, I like some parts of it very much, and I shall dawdle about a little longer, partly for pleasure, and partly from necessity, for I have some business to attend to which will detain me at least another month; by the end of that time I shall be almost a Turk. How will you like it if I should forget my own language, and write to you in Turkish characters?

"But I have been thinking of a good plan, and I mean to proceed with it at once, before my English is all gone. Your papa wishes you to learn the *Geography of Europe* from my letters. Now, you have only heard from me of the places I have visited, viz., Portugal, Spain, Malta, Greece, and Turkey. Suppose, therefore, that I write you some letters on the large countries which I have *not* seen, such as Russia, Germany, France, &c. I will make a short account of each country. Thus, before

proceeding into Asia I shall hope to give you a general sketch of Europe.

"To begin, you may get out your map and look once more at the Mediterranean Sea. You may see that Europe has three peninsulas, which stretch southward into that sea. The most eastern contains TURKEY and GREECE, which we have lately been talking about. That on the west is of a squarish shape; it contains two countries, of which you have also heard, viz., SPAIN and PORTUGAL. There is also another peninsula between these two; it is long and narrow; at the southern end a large piece has been broken off by the sea, forming an island called SICILY. The peninsula itself is in the shape of a boot. What is its name?

"'ITALY,' you say, 'of course.'

"Then you are quite right; and we will talk of Italy next. In order to mark its position more exactly, let us see how it is bounded. On the north is a famous natural boundary; a well-known range of mountains which forms a huge crescent. This range, called the Alps, contains the highest mountains in Europe. They protect Italy from the rude attacks of the freezing north wind, and they also are some protection from the rude attacks of the more hardy northern nations; but such a protection now, when

men can cross almost any place,, is not of much value.

"Look and see how Italy is bounded on the east.

"By the ADRIATIC SEA, which is sometimes called 'the Gulf of Venice.' The western and southern boundaries are also all sea.

"The position of a country has much to do with its *climate*. If Italy were moved up near Iceland, you know that it would be decidedly *cold*; or if it were placed by the side of Ceylon instead, you would expect the climate to be very different. You observe that Italy is near to Africa, which is a very warm place, and when the hot winds of Africa blow northward they warm Italy. The wind, you can see, must cross the Mediterranean Sea before it reaches Italy; and in doing so the water over which it passes cools it slightly. Thus the air in Italy is often 'balmy,' when in other parts of Europe it is cold. You may remember that the climate of Greece is similar; so also is that of Spain. The South of France, too, has the same advantages. In Italy, however, sometimes there are burning and pestilential winds, and parts are very unhealthy.

"When you know the cli-

mate of a country you may often tell what kind of soil and productions it has. Could you but look at the sunny plains of Italy, you would not wonder that men call it '*The Garden of Europe*.' The golden oranges, the citrons and lemons, the purple grapes, the olives, and the mulberries; fields of rice, maize, and even the sugar-cane grow there. The beautiful papyrus, the magnificent date-palm, and the aloë, are found in the parts near Sicily. There are also forests of chestnut trees. On the mulberry trees silk-worms are reared. On the mountains the wild goats and chamois are seen; and around the shores are found the pretty little nautilus with its sails, and many other shell-fish.

"You will find it very easy to remember the position, climate, soil, and productions of Italy. You must have noticed that they are almost the same as those of Greece. With this knowledge we may easily discover what is the commerce of the country, and perhaps something of the people's character, which we will try to do next week.

"Believe me, dear children,

"Your affectionate friend,

"UNCLE RICHARD."

WHEN'ER you speak of those who are away,
Suppose them listening to all you say;
And if you cannot well with truth commend,
By silence prove yourself to be their friend;
Nor, for the sake of starting something new,
Say what you would not should be said of you.

CHARLOTTE YOUNG.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

13th Week.

MONDAY. Moral Biography.

INDUSTRY.

ANOTHER MAN WHO INVENTED A LOOM.

W. Look, Lucy! Papa has bought three books.* What are you going to do to-day, papa?

P. I am going to read to you, and I am going to talk to you, about Jacquard.

Ion. Who, papa?

P. JOSEPH JACQUARD. Look in the Catalogue of the Great Exhibition, and you will see in several places the words "Jacquard Loom."

W. To be sure! I remember noticing a Jacquard loom.

P. And next time your mamma puts on her best silk dress, notice how beautiful it is. Then say to yourself, "Thanks to the Jacquard loom."

Ion. So I will; but I suppose, papa, we are going to hear about Mister Jacquard; then we shall know what to think and say about him.

P. Yes. You may begin by saying *Monsieur* Jacquard instead of "Mister," for he was a Frenchman. At least, at the time when our tale begins he was a French boy. Listen—

STORY OF JACQUARD.†

"In the year 1795, in an upper room of a wretched house in one of the back streets of Lyons, four persons were engaged weaving the gold and silver tissue for which that town is so celebrated. The sun cast a feeble light through the windows, owing to the numberless patches of paper which supplied the place of glass. A painful silence reigned in the small apartment; no sound was heard but that of the moving shuttle and cords. In front of the loom, on a high bench, sat a man of about forty years of age, working his feet to the right and left, on the treadles of the ill-constructed machine. A pale young woman and two young girls assisted him.

"At the time of which we speak, fearful were the sufferings of those who worked at this employment. It was painful to see the contrast of the rich stuffs, thus side by side with the wretched clothing of those miserable beings. Their know-

* Chambers's Miscellany of Tracts, Penny Magazine, and Catalogue of the Great Exhibition.

† The following description is taken, with considerable alterations, from one of Chambers's Miscellanies of Tracts.

ledge of the gold, silver, and silks, alas! only consisted in the labour which the elegant patterns entailed! Loud were the complaints of the *canuts*, or weavers, as to the smallness of their wages.

"Antoinette, do you know where Joseph has gone to?" asked the man, whose name was Jacquard, in a voice which spoke of fatigue.

"He went to the shopkeeper for some silk," replied his wife.

"It is a long time since he went out."

"Hardly two hours; still he is invariably obliged to wait. But, Marie, you appear to be in pain," added she, addressing one of the young girls.

"It is nothing, mother," replied the girl; "it will soon be time for sleep; then we can forget our fatigue."

"Yes, to recommence again to-morrow," said the man.

"What would you wish, Charles?" asked his wife. "Is not this season better than the last, when I have often seen you draw the belt tighter around your body, the more easily to support the pangs of hunger which exhausted your strength? Though the work at present is hard, yet we have, thank God, enough to eat. Cheer up, my children! if the dinner has been meagre, we have at least a good supper of boiled chestnuts and lard, and as much bread as you wish to eat, my little ones."

A slight expression of anguish, uttered by the youngest and most wretched-looking of the girls, attracted the attention

of the woman, who asked if she was ill.

"No, aunt," slowly replied the child, whose look sadly belied her words.

"Would you wish to change with me, cousin?" asked Marie: "my work seems easier than yours."

"No; I am very well here," feebly answered Josephine, her dim and sunken eyes, and her pallid countenance, expressing weariness and suffering.

Another interval of silence ensued—a repose for the lips, but not for the body.

"The wife of Jaubert the *canut* died yesterday. Were you aware of it, wife?" resumed the weaver.

"Heaven protect us! No. Of what did she die?" asked Antoinette.

"Of what did our daughter die last year? Of what do all the *canuts* die before their time? What but of misery and exhaustion! Look at these children, wife!" continued he, looking towards the young girls.

"Ay, wife, it is easy to see," he said, pointing to Josephine, "that she will soon follow her poor mother to the grave. Have you not perceived how cramped and deformed her limbs are? Even rest and quiet at night do not restore their shape?"

"Josephine has been always weak and sickly," replied Antoinette, as if seeking to delude even herself. "When this piece is finished, I shall make her rest for some days, and she will be better after it. With Marie it is different; her paleness only

arises from confinement in this close and ill-aired room; a little out-door exercise will restore her good looks.'

"'Alas,' answered the weaver, without ceasing his employment, 'we shall not be able to preserve her any more than we could her sister: she will die, and her brother also, my dear little Joseph, and we shall have no one left to close our eyes, my poor wife!'

"'God is good, Charles!' answered Antoinette, as if to raise her husband's courage. 'He will not leave us childless. Do you feel unwell, Marie?' said she to her daughter.

"'No, mother; only a little fatigued,' replied the young girl. 'It is Josephine who is ill.'

"At this moment their conversation was interrupted by the entrance of Joseph, the son of Jacquard, a tall, delicate lad of thirteen years of age. Like most children of the canuts, he had a subdued and sad expression of countenance. When at rest, it spoke of nothing remarkable, yet when his pale features were lit up by some sudden emotion, it changed his entire appearance. The truth is, Joseph was no ordinary boy. God had given him good natural faculties, which he had cultivated by reflection. Joseph was always thinking on some useful subject or other; but he was silent and modest, thus his own family did not know the extent of his thoughts.

"'Where have you remained such a length of time?' asked the weaver of his son.

"'First of all, here is the silk,' replied Joseph, handing a bundle to his mother; 'and now I'll tell you what detained me, father. In returning from the shop of M. Guillaume, I met Toussaint, the son of François the canut. When I saw him crying, I inquired the reason. "My mother," replied he, "has broken the loom; father is from home, and I have been with Martel the joiner to try and get him to repair it, but he is so busy that he cannot come: the piece must remain unfinished; and when my father returns to-night, he will be very angry about it. Oh, dear! what shall I do?" Then, father, finding, from what he told me, that the loom was not much injured, I went home with him, and mended it, so that his mother is now at work again.'

"'You! all alone?' asked the weaver, surprised.

"'It did not require to be very clever, father, to do so. What a pity that the looms are so badly constructed!'

"'You think so!' said his father ironically. 'I should like to know what you see so bad about our looms?'

"'Every portion of them, father,' replied the boy with animation. 'Must it not be ill-constructed when it requires so much exertion to put it in motion? Is it not a machine which actually kills the workmen? Do I not see yourself covered with perspiration? Look at Marie, who has lost her rosy and healthful appearance; observe Josephine —' The little canut ceased speak-

ing; he could not find words to express his feelings at the decay of the poor little girl.

"It is a horrible machine!" added he a moment after.

"If you have no objection," he continued, "I shall take Josephine's place for a while, father. See, her hands can scarcely ply the cords. Come, Josephine, what is the matter with you?" added he, as the poor child ran towards him, and was caught in his arms.

"Nothing!" replied the young girl in a feeble voice, endeavouring at the same time to return to her employment. But the exertion had been too much for her, and she leaned on the shoulder of the little canut.

"Josephine! How pale she is!" exclaimed Marie, running towards her cousin. "Josephine, why do you not tell us when you are suffering?"

"Do not weep thus, Marie," said her mother, as she held some vinegar to the nostrils of Josephine; "this will be nothing—nothing, I hope." But the terror depicted in her countenance showed that she had not that hope which she wished to inspire in others.

"Nothing!" repeated Marie, weeping and pressing her cousin's hands in hers. "Nothing! see how pale she has become, and her hands are damp and cold as ice. Josephine! Oh, mother, she is surely dying!"

"Charles, run and seek the doctor," said Antoinette to her husband. "Go quickly, I intreat you. May God spare her!" ejaculated the poor woman in an agony of grief.

Charles immediately left the room without replying.

"Josephine, speak to me!" exclaimed Marie; "for pity sake speak to me!"

Josephine answered not, but remained motionless, supported in the arms of young Jacquard, who gazed on her in sad and silent grief. Her eyes were closed, and a slight breathing alone told that she existed. Not a word was spoken by any of the unhappy family as the step of the weaver was heard on the staircase. Sobs alone betrayed their sorrow, as they looked on the deathlike features of the young girl. The breathing of Josephine had become every moment less perceptible, and it ceased altogether, as the doctor entered the room.

"Is there, then, no hope?" asked Charles, as the doctor, after examining the dying girl's pulse, sadly shook his head.

"You have sent for me too late, my friend," replied the physician, letting fall the arm of Josephine.

"As he left the apartment, how difficult was it for the members of this sad family to bring the reality home to their minds! And yet the truth was there, terrible and striking—the poor little creature was no more!

A burst of sobbing succeeded. But stern necessity forbade any show of grief; the eyes of each were dried; and silently removing the body of the dead child into a corner of the room, and covering it with a wretched counterpane, the family resumed their employment.

"Joseph, as if it had been a matter of course, seated himself in the place which had been occupied a few minutes before by his cousin, crouching himself up in the same painful and forced attitude that had caused her death."

Ion. That is a very dreadful scene, papa! Such troubles were enough to drive Joseph Jacquard to invent a machine. I have read in my Latin *Delectus*, "*Necessity is the mother of invention*," and now I don't wonder at it.

P. Such a dreadful necessity as that ought to be stopped by some invention, or in some other way. Ah! we little know how industrious people suffer! But, Ion, Josephine's was an honourable death. Perhaps it is even better to suffer so—to work hard and die, than to live and be lazy.

Who would dare to do that?

Ion. To do what, papa?

P. To live and not *use* the time God gives him—to waste it; in a word, to be *lazy*.

(Continued at p. 209.)

THE SONG OF THE FROSTED WINDOW-PANES.

Look, how beautiful are we!
Fashioned in a night,
Never human eye did see
More enchanting sight.
Floral shapes ye here discern,
Boughs that intertwine,
Graceful as the feathery fern,
Or the tendrilled vine.

Look, how beautiful are we!
As the sunbeams fall
On our leafy mimicry,
Glorifying all.
Never jewels rich and rare,
Gems that gleam and shine,
With our beauty may compare,
Frost-work crystalline!

Truly, beautiful are ye,
Frosted window-panes!
Bright your glory as can be
While it here remains;
But, like many lovely things
That we see on earth,
Ye have quick evanishings—
Death soon follows birth.

H. G. ADAMS.

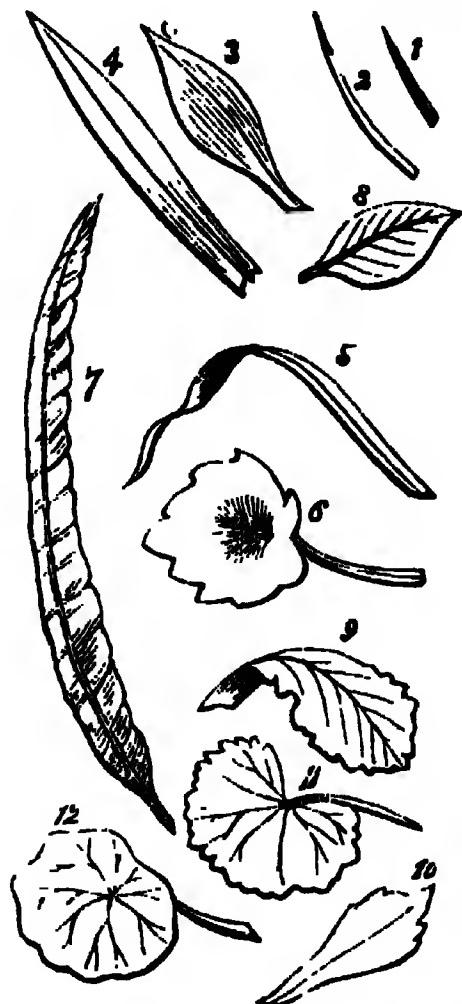
CHAPTER II.

THE PARTS OF A PLANT—THE SAP.

L. If you please, papa, I want to show you something before we begin our lesson. Will you just look at these leaves, and see how pretty they are? We have picked them from the garden and the greenhouse, and have written all their names.

P. They are very pretty; and I see that they are all simple leaves. It will be a good exercise for you to find suitable names for their different shapes. After we have finished to-day's lesson, you may look back at the little drawing of the forms

SIMPLE LEAVES.



NAMES OF THE PLANTS.—1. Juniper. 2. Jonquil. 3. Ribwort. 4. Iris. 5. Grass. 6. Navel-wort. 7. Banana. 8. Marjoram. 9. Cowslip. 10. Shrub candy-tuft. 11. Round-leaved mallow. 12. Nasturtium.

NAMES OF THE PLANTS.—1. Cuckoo-pint. 2. Burdock. 3. Sorrel. 4. Ground ivy. 5. Mercury. 6. Hepatica. 7. Tulip-tree. 8. Fiddle-dock. 9. Black poplar. 10. Water caltrops.

TUESDAY.

PLEASANT PAGES.

BOTANY.

of leaves (page 151). You may then compare their forms with those in the drawing, and name them accordingly.

P. We will talk to-day of a very important part of the plant.

You have heard of the roots which *collect* the sap, of the stem which *conveys* the sap, of the leaves which *digest* the sap,—to-day let us talk of the **SAP** itself.

We have already had the principal part of its history. Do you remember anything that I have said of it?

W. Yes, papa; you said that when the sap ascends to the leaves it is little better than water, but that when it descends it is very thick.

P. It is then not only of different substance, but it possesses different qualities.

In some foreign trees, for instance, the rising sap is quite harmless,—it is often drawn off, and it makes a refreshing drink; but when the sap of the same tree descends, it has most acrid and poisonous properties, so that you could not bear it within your mouth.

Ion. And do the leaves cause all that change in the sap, papa?

P. Yes. Think how curious it is that this great change should be made by the addition of gases from the air! Water is composed of two gases—*oxygen* and *hydrogen*. Can you remember that?

Ion. I can; we have heard those names so often—oxygen and hydrogen.

P. But when the rising sap has reached the leaves, it is

something more than water: for it contains oxygen, hydrogen, and carbon—three gases.

W. Yes. But where did it get the carbon from?

P. It *collected* it on its way up through the sap-vessels. In these little vessels the sap finds matter which has been stored up from the previous year: it dissolves this, and carries it up with it.

W. But what is the good of doing that, papa?

P. I am not sure. I told you that plants not only exhale the water of their sap, but they *breathe*. You have often heard of the carbon which makes the blood in our veins so black?

Ion. Yes; it is the waste from our bodies.

P. And you know how the oxygen from the air mixes with that carbon and carries it off in the form of breath?

W. Yes; we have heard of that a great many times.

P. Exactly in the same way the carbon of plants is collected; it unites with the oxygen of the sap, and forms carbonic acid, which is breathed out through the leaves. I think, therefore, that the matter which the rising sap finds in the sap-vessels, is the *waste* carbon that forms the “breath” of the plant; but I am not sure of this.

Ion. We will suppose it to be true; then we shall have heard of three changes made with the sap when it reaches the leaves.

1st, It carries off the waste carbon, and forms *breath*.

2nd, It exhales a great quantity of its *water* through its

stomata, which are kept open by the light.

3rd, It absorbs carbon from the carbolic acid in the air; thus its qualities are changed, and it becomes thicker.

P. All this you have learned before. Let us now see what becomes of the sap thus thickened and prepared.

We may say, 4thly, It descends through a set of vessels which are in the under side of the leaf, through the petiole, and down the branches.

As I have told you, it passes down between the sap-wood and the inside layer of bark. It is now in a most interesting state, and is called *cambium*.

Ion. Why is it interesting?

P. Because it is the substance from which the new parts of the plant are formed. It forms, as I have told you, new flowers, seeds, and buds; some of it forms the new layer of sap-wood, and the new layer of bark.

W. I should like to see some cambium.

P. You may easily do so by cutting the stem of a plant when the cambium is descending. You will find that it is a sticky substance like *albumen*, which you have often seen.

Ion. Yes; the white of an egg is *albumen*.

P. And you know that the *fibrin* in the blood of animals is made from *albumen*. See how the cambium is like it. If you draw some off from the stem and let it settle, it will arrange itself in a tissue just as fibrin does.

W. And you said fibrin is the *liquid flesh* of animals, papa.

P. True; so cambium may be called the *liquid wood* of the plant.

W. You said also, papa, that fibrin is formed from *albumen*; what is cambium formed from?

P. Cambium consists almost entirely of two substances, gum and sugar. These two substances are the basis (or foundation) of a tree's wood, just as *albumen* is the basis of an animal's flesh.

L. Which is the better foundation, papa?

P. *Albumen* is; and if you like to remember the hard names of some gases, I will show you why. You will then see the great difference between animal and vegetable substance.

GUM and **SUGAR** consist of carbon, oxygen, and hydrogen.

But **ALBUMEN** consists of carbon, oxygen, hydrogen, and **NITROGEN**; and without this gas, nitrogen, animal life cannot be sustained. Now you may see why you could not live on the wood of trees.

L. Yes; because it is formed of gum and sugar (or *cambium*), and has not any nitrogen in it. But some parts of vegetables contain nitrogen.

P. Yes—the seeds of the corn-plants, peas, beans, &c., and there is a little in the tubers of the potato and others.

I think that you now understand the principal offices of the thickened sap which has been digested in the leaves.

W. It is very wonderful to think of, papa. It consists principally of gum and sugar, and yet it is formed into so many different kinds of flowers, fruits, and buds!

P. You would wonder much

more if I had time to tell you of the *peculiar* substances, or "secretions," as they are called, which are formed from this sap. The substance in the **SEEDS** of the corn-plants which contains nitrogen, is called *gluten*; the similar substance in the leguminous plants is called *legumen*. From other seeds we get *oils*, such as cocoa-nut, olive, rape, and linseed oil. From the **FLOWERS** of plants we get "volatile" oils, containing beautiful odours, such as oil of rose, oil of lavender, jessamine, almonds, and cloves. Besides these, we get *dyes* and *colouring substances* from the **WOOD**, *medicines* from the **BARK**, and *resins* and *gums* in great variety. I will just mention a few of the substances into which this sap is changed. It forms turpentine, resin, tar, India-rubber, gutta percha, mastic, gamboge, gum-arabic, gum-tragacanth, vegetable wax, and tallow; vegetable milk, camphor, opium; the dyes, saffron, turmeric, indigo, madder, logwood, archil, annatto (for colouring cheese), nut-gall (the acid of which is used to make black ink), citric acid, oxalic acid, and many more things besides. You may truly wonder when you think of the changes which God makes with the gases which the trees gather from the air and earth!

W. And it seems wonderful when you think that the gases which form the vegetables were once part of some animal. I shall become a vegetable one day—I'll be a cabbage! I mean "*my body*," when it decays, and is dissolved again into

gases, they may become part of a cabbage.

Ion. Or it may become part of the sap of a tree, and may form some vegetable oil. So you may one day be burning in a lamp, and may give light for your descendants to read by.

W. Ah! and the vegetable substances we use now may have formed part of some man or animal. Papa's pocket-handkerchief may have been part of *William the Conqueror!* You said that sap forms dye, and the handkerchief is dyed yellow with saffron.

P. That may all be true; but one of the great lessons to be learned is, that God keeps order in His kingdom of nature by these changes. This lesson you will learn more fully soon.

Memory Lesson 4. THE PARTS OF A PLANT—THE SAP.

1. *The Sap is the fluid part of the plant, similar to the fluid in animals called blood.*

2. *It is absorbed from the earth by the spongioles at the ends of the rootlets, and is then little else than water. It is formed into perfect sap by the leaves.*

3. *The thickened sap, which descends the tree, consists principally of gum and sugar, formed from the carbon inhaled by the leaves. The thick sap which forms the new wood is called "cambium."*

4. *The functions of the sap are to repair the waste in the plant, and to form new parts so that it may grow; being similar to the functions of blood.*

THE ENGLISH TRAVELLER.

LONDON—THE ANCIENT BUILDINGS (*Continued*).

"**M**Y DEAR CHILDREN,

"Are there any more ancient buildings?" I asked my friend, as we walked homeward from Westminster to the City.

"Yes, here is one. This old gateway, and a very inconvenient place it is. You see that it divides the Strand and Fleet Street. Now look at the stream of omnibuses and other vehicles, and see how they have to wait until they can get through the narrow gateway."

"But it is a fine old stone building," I said.

"So it is; yet it is an obstruction, for all that. It is only allowed to remain because it is so ancient, and is a great favourite. It is one of the City boundaries, but it is not of much use on that account. The gates are only shut on great occasions, when the Queen visits the City. Then, as Her Majesty rides from Westminster up to the City in her fine state-coach, the state-coach, and horses, and guards, and all the other coaches in the fine procession have to stop. The Queen then has to knock at the gates, and to ask the Lord Mayor to let her in. Then the Lord Mayor is very gracious. He opens his gates, and allows Her Majesty to enter."

"What is the good of doing that?" I asked.

"Oh, never mind! You must not always ask that question. I suppose you know that

this gateway is called TEMPLE BAR. It was designed by Sir Christopher Wren, and was built in 1672, after the great fire of London."

"We went through Temple Bar, and my friend pointed out a narrow turning in Fleet Street, which led to 'the Temple.' The Temple is one of the *Inns of Court*, which abound in this neighbourhood. These inns of court are the headquarters of the lawyers and young law students. Round about Fleet Street and Chancery Lane are the Inner Temple and Middle Temple, Sergeants' Inn, Clifford's Inn, and Lincoln's Inn. Beyond Chancery Lane, are Gray's Inn and Furnival's Inn. They are all queer, mouldy-looking old places.

"What was that fine building which I peeped into as we came down the Strand?"

"That is another of the public buildings. It is called SOMERSET HOUSE. It was first built as a palace by the Duke of Somerset, whilst he was protector, in the reign of Edward VI. In the year 1780, the old building was pulled down, and the present one erected. It is now used principally for "Government offices," such as the Admiralty, the office for Stamps and Taxes, &c."

"We passed on, away from Temple Bar, down Fleet Street, on into Cheapside. On our

way thither we stopped to look again at CHRIST'S HOSPITAL, or the *Blue-coat School*, as it is commonly called.

"Stop!" said my friend, when we reached the iron railings. Here we found a knot of people looking through at the boys who were playing in their large playground. I never saw so many boys together before, and as they jumped and ran about in their long blue petticoats and yellow stockings, they looked very singular.

"There are about 1,400 children in this school," said my friend. "In Henry VIII.'s time the monastery of Greyfriars stood here. You know what was done to the monasteries and religious houses in that monarch's reign. This monastery was given by the king to the people of London for the use of the poor. His son, the young EDWARD VI., increased the value of the gift by adding to its riches. He signed a charter, by which it became a charity-school for poor and helpless children. From that time its riches have increased, until its income is about £60,000 per annum.

"The younger children do not reside in London; but about 500 are brought up at Hertford."

"On reaching Cheapside, we turned down a small street called King Street, and arrived at the GUILDHALL.

"A strange old building it seemed, with its numerous little Gothic windows; but we quickly passed inside into a very large hall.

"This," said my friend, "is the hall or banqueting-room, where the great City feasts are held. It is 153 feet long, and 53 feet high, and it has space for 6,000 persons. I dare say that more turtle has been eaten in this great place than in any other part of the world. Hundreds, and perhaps thousands, of dishes are sometimes served at one time. The dazzling gold and silver plate on which the various meats and fruits are brought up is worth an immense sum of money. If you were to come to see a City banquet, it might remind you of the old Romans, and their great feasts; but those given in this room by the MAYOR and CORPORATION are perhaps more magnificent. There were 6,000 people at the great feast given to the sovereigns of Europe in 1814."

"Those are splendid windows at each end of the hall," I said. "Look at those strange men in the two further corners of the room; they look like giants."

"Those," said my friend, "are the two famous characters whom you so often heard of when you lived in the nursery. They have been the subject of many a nursery tale."

"Are they the famous GOG and MAGOG?"

"Yes; let us go and see them. We may walk round the hall."

"Then, dear children, for the first time in my life, I went up to Gog and Magog, and stood close to them. I had felt great veneration for them when quite a little boy, but now my awe

quickly vanished, for I found that they were made of wood. They were only ugly wooden images, covered with a great quantity of paint. One is said to represent an ancient Briton, and the other a Saxon. We soon left them to look at the more beautiful statues which were placed round the hall. There were statues of **LORD CRATHAM**, and **WILLIAM Pitt**, **NELSON**, and **ALDERMAN BECKFORD**.

"Are there any other offices in the Guildhall?" I said, "besides this great banqueting-room?"

"Yes. There are several courts of law which are peculiar to the City. There is the Lord Mayor's Court, the Sheriffs' Court, the Chamberlain's Court, and a Court of Petty Session where the Lord Mayor and aldermen act as magistrates, and try all who are taken up by the policemen for petty offences. There are cases being tried in some of these courts now, but it is not worth while to stop and hear them. Let us go."

"On leaving the hall, I asked my friend, 'What is the use of the Lord Mayor, and what is meant by a "corporation"?' "

"The Lord Mayor and the Corporation," he said, "are the "government" of the City. Every large city has its mayor, whose business it is to keep it in order while he is in office. Most cities have a certain amount of property belonging to them. This is *public* property, and is to be spent for the public good. As the mayor

and corporation are the government, it is their business to use this money properly. They spend it to make improvements in the streets and buildings of the city. It is also spent in maintaining the police and prisons—in "entertainments," &c."

"Has the City of London much public money?" I asked.

"Yes; the houses and lands belonging to the City are a very large property. The money received as *rent*, and from other sources, is more than £160,000 per annum. This may seem to you a large sum to spend every year, but part of it is also spent in salaries to the officers of the Corporation. The Lord Mayor has £8,000 for the year that he is in office."

"That," I said, "seems to be too much."

"Not at all. The Mayor generally finds while he is in office that his expenses are greater than his income. The great **LORD MAYOR'S SHOW** must cost a great deal of money; and the banquet that follows is, perhaps, more expensive still."

"It is a curious thing that he should spend the public money in that way. You said that it was used for the *public good*."

"And so it is. The public are amused, and the amusement does them good."

"But to spend so much for the dinner afterwards?"

"Well! the Corporation must be kept up, and that cannot be done without dinners."

"By this time we had

passed Cheapside again, and were standing in the *Poultry*. ‘There,’ said my friend, ‘is another of the ancient buildings. It was begun in the year 1739, and it is a very large place. It contains a grand “Egyptian Hall,” which has nothing Egyptian about it, a ball-room, a saloon, and other splendid apartments.’

“What is the building called?”

“It is called the **MANSION HOUSE**; and you might think it was a very bad place, for it changes its tenants every year.”

“Who is the tenant now?”

“**THE LORD MAYOR.** It is the residence of the Mayor during his year of authority; when his time is “up,” he has to move out, and make room for his successor.”

“I understand,” I said. “I think I should like to be Lord Mayor. Where must I go to be chosen?”

“Go where you like,” said my friend, laughing, “it will not matter much. But you must first be made an alderman. I will tell you how it is all done. The government of London consists of the Lord Mayor, two sheriffs, twenty-five aldermen, two hundred and six common-councilmen, and other officers. Each alderman has his own part of the City to attend to, which is called his *ward*; so that there are twenty-six wards, as *Aldgate* ward, *Bishopsgate* ward, *Cripplegate* ward, &c. Each alderman is also a justice of the peace for the City, and sits to try the prisoners which are brought

into the **Mansion House Court**, or **Guildhall Court**, by the policemen.’

“‘What must I do,’ I said, ‘to be made an alderman?’

“‘You must do a great many things. You must, I believe, become a freeman, and a liveryman, and then a common-council-man. Then you must wait until the alderman in your ward dies; then you must show the freemen of that ward that you are better fitted to be an alderman than any one else; and then—you must persuade them to elect you.’

“‘Then, I am afraid I shall not have time to do all that, as I am only going to remain in London a week. Perhaps you will try to be Lord Mayor instead. Here we are at the **MONUMENT**. Are you going up?’

“‘No, thank you,’ said my friend; ‘I want to get home to tea. This is the last of the ancient buildings which we will notice. You know that **SIR CHRISTOPHER WREN** lived at the time of the great fire of London; and that he rebuilt a great part of the City. He also designed this monument, which was erected in remembrance of the sad event, at a cost of £15,000. It is situated about 202 feet from the spot where the fire began, and is, therefore, built 202 feet high. If you go inside you can ascend to the top by a black marble staircase, which is *spiral*. On the summit you see that there is a blazing gilt ornament. From the platform which you see around it, there is a most splendid view of the City.’

"After looking at the people who were up there, and who seemed very small indeed, we turned our faces towards home, where I counted up the principal *ancient buildings* of London. Here are their names. The TOWER, ST. PAUL'S, WESTMINSTER ABBEY, CHRIST'S HOSPITAL,

GUILDHALL, the MANSION-HOUSE, and the MONUMENT. Think about them, and see what you can remember about each; and believe me,

"Dear children,
"Your affectionate friend,
"HENRY YOUNG."

GOD SPEED THE PLOUGH.

God speed the plough, the toiling plough,
O'er hill and valley fair:
A blessing on his sunburnt brow
Who guides its shining share;
A blessing on his fertile land,
And on his loaded wain,
And on the merry harvest hand
That reap the ripened grain.

God speed the plough, the peaceful plough;
Sword! rust within thy sheath;
A fierce and sullen thing wert thou,
Oh! chosen friend of death.
Go, moulder with the helms and shields
Of days long since gone by,
For the plough hath won o'er bloodless fields
A holier victory.

God speed the plough, the noble plough,
The tiller's manly toil,
That bids the golden harvest glow
O'er all the fruitful soil;
Not ours the olive and the vine
Of sunny France and Spain;
Thou hast denied the oil and wine,
But not the blessed grain.

Now, ploughman, trace the furrow fair
Along the cultured mead,
Then, Father, to thy fostering care,
We leave the precious seed;
Then, who has heard the lion's cry,
And fed the raven's brood,
Send down Thy blessing from on high,
And give Thy children food.

Canada.

R. A. P.

ADDRESS TO CERTAIN GOLD FISHES.

RESTLESS forms of living light,
 Quivering on your lucid wings,
 Cheating still the curious sight
 With a thousand shadowings ;
 Various as the tints of even,
 Gorgeous as the hues of heaven,
 Reflected on your native streams
 In flitting, flashing, hollowy gleams !
 Harmless warriors, clad in mail
 Of silver breastplate, golden scale ;
 Mail of Nature's own bestowing,
 With peaceful radiance mildly glowing—
 Fleet are ye as fleetest galley,
 Or pirate rover sent from Sallee ;
 Keener than the Tartar's arrow,
 Sport ye in your sea so narrow.
 Was the sun himself your sire ?
 Were ye born of vital fire ?
 Or of the shade of golden flowers,
 Such as we fetch from eastern bowers
 To mock this murky clime of ours ?
 Upwards, downwards, now ye glance,
 Wenving innyn a mazy dance ;
 Seeming still to grow in size
 When ye would elude our eyes—
 Pretty creatures ! we might deem
 Ye were happy as ye seem,
 As gay, as guinesone, and as blithe,
 As light, as loving, and as lithe,
 As gladly earnest in your play
 As when ye gleam'd in far Cathay ;
 And yet, since on this hapless earth
 There's small sincerity in mirth,
 And laughter oft is but an art
 To drown the outcry of the heart ;
 It may be that your censceless gambols—
 Your wheelings, dartings, divings, rumbles—
 Your restless roving round and round
 The circuit of your crystal bound—
 Is but the task of weary pain,
 An endless labour dull and vain ;
 And while your forms are gaily shining,
 Your little lives are only pining !
 Nay—but still I fain would dream
 That ye are happy as ye seem,
 Deck'd in Oriental pride,
 By homely British fireside.

HARTLEY COLERIDGE.

SONGS FOR THE SEASONS.—SPRING.

(FROM "SONGS FOR THE WILDERNESS.")

*Words and Music by Miss C. A. HOWELL.—Arranged for three voices
by G. CHALONER.*

How sweet the early breath of Spring, When birds a - bove are singing, And

How sweet the early breath of Spring, When birds a - bove are singing, And

o'er the beautious earth below The pretty flowers are springing! But

o'er the beautious earth below The pretty flowers are springing! But

sweeter far the youthful love, To God sin-cere - ly given, For

sweeter far the youthful love, To God sin-cere - ly given, For

when all these are past, it will For e - ver bloom in heaven!

when all these are past, it will For e - ver bloom in heaven!

Where can ye go, ye little ones,
Where can you safely rest?
Oh! come to Jesus, come and lean
Upon his tender breast.

In every storm of future life,
A refuge there is found,
While over you His wings are spread,
His arms encircled round.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

14th Week.

MONDAY. Moral Biography.

INDUSTRY.

ANOTHER MAN WHO INVENTED A LOOM (*Continued*).

The death of Josephine made a deep impression on the mind of the young Jacquard. "I think," he said to his father, the next time he spoke, "I cannot be *accident*." He told his father that no one ought to work at the loom unless a better one were invented, because it killed the workmen.

Young Jacquard's father shook his head, and told his son that it could not be improved,—just as the manufacturers of Manchester had told Dr. Cartwright. The boy, however, persisted in his idea, and persuaded his father to let him leave the business of a weaver, and become a book-binder.

As a bookbinder's apprentice, Jacquard showed a great taste for mechanics. He improved his knowledge, and before he became a man no doubt he had thought much about the bad loom which had caused the death of Josephine, and so many others. I dare say that he thought of many plans for making a new machine, but he did not carry them out.

At last a circumstance happened which induced him to try his abilities. He was read-

ing a newspaper, when he saw that the *Royal Society of London* offered a large sum of money to any one who would invent a machine which they wanted. This machine was to be useful for a very peculiar process of thread-making. As soon as Jacquard saw this, he set his wits to work, and after many fruitless attempts, he found out the plan of weaving that was wanted. He then made a model of a machine to weave the thread according to that plan.

The whole invention, however, was so simple, that he thought, of course, somebody must have discovered it before him; so he put the model away, and forgot all about it.

The model might have been quite forgotten, but that a friend was one day talking with Jacquard about the difficulty in making the thread-machine that was wanted.

When Jacquard heard this, he showed his friend the model that he had made. "Of course," he said, "I am not the only person who has discovered it."

Jacquard's friend examined his model, and asked to be trusted with it that he might show it to some one else.

Jacquard consented; and soon he again forgot all about the matter, while his friend took the treasure which was lent him to the proper authorities.

The model, however, was not forgotten by others who saw it; and before long Jacquard received a summons to attend before the magistrate (called the *prefect*) of the city of Lyons. Jacquard could not imagine why he was sent for, but he immediately obeyed the order, and soon stood before the magistrate.

"'Monsieur,' said the magistrate, 'I have heard of your ability as a mechanic, and have therefore sent for you.'

"'It must be some person who wishes to pass off a joke at my expense, Monsieur le Prefect,' said Jacquard, confused.

"'I assure you that it is not: have you not lately made an admirable discovery?'

"'Very simple, sir—very simple.'

"'But very useful to humanity.'

"'I have not been so vain as to suppose so, sir.'

"'The mechanism is most ingenious: you are indeed a clever workman, M. Jacquard!'

"'Monsieur is very good to say so.'

"'And this filet!' said the prefect, as he took from his desk the model which Jacquard had given to his friend.

"'It certainly is mine, sir; but I had altogether forgotten it until a few minutes since,' replied Jacquard with naïveté."

The magistrate then told him that no one else who had seen it had forgotten it. He told Jacquard to go home and make a similar machine. He did so, and at the end of three weeks he brought it back to the prefect, who sent it at once to the First Consul of France, M. Napoleon Bonaparte.

Bonaparte was, you know, a man of war, yet he knew how important were all improvements in the arts of peace. He did not, however, show much respect for the inventor, but sent an order from Paris for his arrest. It therefore happened that a few weeks after Jacquard's visit to the prefect he was again sent for.

"'Monsieur,' said the prefect to him, 'you must immediately set out for Paris.'

"'Set out for Paris, sir?' replied Jacquard! 'And by whose orders, may I ask?'

"'Those of the First Consul, Napoleon Bonaparte.'

"'It is impossible: there must be some mistake as to the name, sir. What have I done? What can the First Consul want of me—a poor, unknown workman?'

"'The orders of the First Consul admit of no delay, my dear M. Jacquard: they must be obeyed. A postchaise waits for you at the door; and further, this man (the prefect pointed to a *gendarme*) has orders to accompany you, and not lose sight of you.'

"'But I am neither a robber nor a criminal, sir; there must be some error as to the name.'

said Jacquard in extreme agitation.

"Calm yourself, M. Jacquard," said the prefect. "Be assured that the First Consul is a man who knows how to appreciate talent wherever it is found. You will find that he has good reasons for acting thus. Come, get into the chaise, M. Jacquard; I promise that no harm shall befall you; the gendarme will take care that you want for nothing. Good-by, sir, and a pleasant journey to you."

Jacquard had never before been in Paris; and the first place they stopped at on their arrival in the capital was at the Conservatory of Arts. The first persons whom he met with were Bonaparte, then First Consul, and Carnot, the prime minister.

"Is it you who call yourself Joseph Jacquard?" demanded Carnot in a brusque tone. "Is it you who pretends to do what no one else can accomplish—to form a knot on a stretched cord?"

Surprised by the tone of the speaker, and awed at finding himself in the presence of such high personages, the youth did not immediately reply. But Bonaparte, with that kindness he could so well assume, asked Jacquard a few trivial questions, and led him by degrees into an animated conversation.

Jacquard was soon after set to work in the Conservatory. Here, all the secrets of mechanics, which till then he had been unable to study, were laid open to his inspection. Every

day he learned something new from the wonders of industry around him; and he again thought of his long-cherished idea of constructing a loom to relieve the wants of his native town. Now all his difficulties seemed to vanish, and he constructed a full-sized machine after the model that had been of such service to him. This, when completed, gave general satisfaction. A magnificent shawl, destined for Josephine, the wife of Bonaparte, was shown him. It had been wrought in a loom that had cost more than twenty thousand francs. He tried to manufacture this luxury with a less complicated, and a much less expensive machinery; and in this he succeeded beyond his most sanguine expectations.

While thus employed for Bonaparte, he had steadily persevered in his endeavours to perfect the machine which had engrossed his thoughts from boyhood, and in 1801 completed the one known as the 'Jacquard Loom.' This was exhibited at the Exposition of Arts in Paris the same year; and, with all its improvements, worked by steam-power, it was seen in the GREAT EXHIBITION of 1851.

The Jacquard-loom, however, was ill received by those for whose benefit it was intended. Jacquard received from the French Government a pension of a thousand crowns for his discovery, and he expected that he should have no difficulty in establishing the loom in his native city. Filled, therefore,

with the hope of doing good to his fellow-townsmen, Jacquard returned to Lyons, and having, at his own expense, constructed one of the machines, he invited the *Council des Prud'hommes* (a body who watched over the interests of the Lyonese trade) to inspect it, and give their opinions.

"Alas! all Jacquard's hopes were soon dispelled. To his great dismay 'the Conseil' not only opposed the introduction of his loom, but gave orders that it should be publicly destroyed. This was accordingly done in the *Place*, amidst the shouts and rejoicings of the populace. In his own words, 'the iron was sold for iron, the wood for wood, and its inventor disgraced.' His invention excited such an enmity against him among the weavers, that he three times narrowly escaped with his life.

"But at last the ignorance and prejudice of the people of Lyons were obliged to give way. The manufacturers of England adopted the Jacquard loom, and made such rapid strides in the manufacture of gold and silver tissues, that the effects of their competition were felt. The inventor then came forward once more; he generously forgot the bad treatment he had received, and under his superintendence looms were constructed, and were soon employed in most of the silk manufacturing districts of France.

"Many improvements were made from time to time by Jacquard; and, happy in the

thought of being instrumental not only in adding to the prosperity of the workmen and the employers, he lived modestly and retired, without desiring anything more.

"In a great measure owing to this machine, the *canuts* have acquired almost a new existence. If the work is not always plenty, at least it does not kill them. In the schools and in the workshops, instead of the pale and emaciated beings who formerly earned a scanty subsistence with their very life-blood, are to be seen well-dressed and ruddy-looking children. The men no longer wear that heartbroken and timid look which belonged then to their profession, but appear at the present day the most healthy and well-disposed class of artisans in Lyons.

"The fabrication of the stuffs has also wonderfully increased. In 1788 there were but two hundred and forty looms in Lyons for the manufacture of stuffs; in 1801, at the time of Jacquard's discovery, there were two thousand eight hundred; at the present day there are more than thirty-two thousand looms at work, of which number the ingenious machines invented* by Jacquard count nearly one-third.

"Towards the close of his life, Jacquard, wishing to enjoy the society of his sister and her children, retired to a small villa, a few lengnes from Lyons. Here he was visited by many illustrious foreigners, anxious to converse with the man whose

name had spread over all Europe.

"Through you, the manufacturers have all grown rich," remarked a visitor.

"So much the better," replied Jacquard. "I have retired on a moderate competency, and I have no cause to complain; it is sufficient for me that I have been of service to my fellow-citizens."

"Your townsmen," said a stranger of distinction, "have not treated you with proper respect."

"I have received more than I sought," replied Jacquard. "and I desire no further."

"This useful man, born of obscure parents, and who were not forgotten by him in his prosperity, ended his days peaceably, in August, 1834. A subscription was opened by the Conseil des Prud'hommes of Lyons, for the purpose of raising a monument suitable to the memory

of him who had become one of the benefactors of mankind."

THE SWALLOW.

THE WARM BREATH OF SUMMER
Has burst the frost's chain;
The earth is all blossom;
But the bird of my bosom,
My beautiful swallow, returns not again.

I hear its gay fellows—
More faithful, alas!—
The bright dawn saluting;
With rapid wing shooting,
I see them across the blue lake's surface pass.

Long known—long beloved!
When wilt thou return
To cheer me, heart-weary?
In absence so dreary
From thee, O my swallow! I linger and mourn.

For thee does my window
Half-open remain:
What hinders thee, dearest?
Can it be that thou fearest
In me a harsh tyrant with prison and chain?

The flower in the wild-wood
Gives place to the fruit:
The summer on stealeth;
And each day revenleth
My hope of thy coming grown fainter and mute.

My strain, once so gleesome,
Is now a sad song:
Art thou faithful no longer?
Has death proved the stronger?
No matter; thy minstrel will pine for thee long.

CHAPTER II.

THE PARTS OF A PLANT—THE FLOWER.

W. Here is a pretty flower.



P. So it is. It is *an organ of reproduction*.

Ion. There now, papa, you are giving us one of your long names again; but I remember what "reproduction" means. You said that when a plant begins to grow, it dies; and, that before it dies, it forms little organs which *produce again*; that is to say, they form new plants.

W. And those little organs are called seeds; so, how can a flower be an organ of reproduction? It will not grow if you put it in the ground.

P. Wait a little while, and you will see. The organs we have hitherto talked of, such as the root, leaves, and sap, are useful to *produce new parts*, and to sustain the life of the tree; but these organs of reproduction have different functions. Let us examine the flower. If you will point out its parts, I will tell you their names.

W. Then I will begin with the Stalk of the flower. Has that any name, papa?

P. Yes; the stalk of the leaf, you may remember, we called the *petiole*. The flower-stalk is called the *peduncle*.

L. Both the *peduncle* and the *petiole* begin from the same place on the stem of the plant. A little way up on the peduncle there is something like a small leaf.

P. That is not a true leaf; it is called a *bract*. What else do you notice?

Ion. Look at the *end* of the peduncle; the flower does not grow directly upon it, but there is a sort of green cup made of leaves for the flower to sit in. I suppose it is a protection for the flower, so that it may not break off easily.

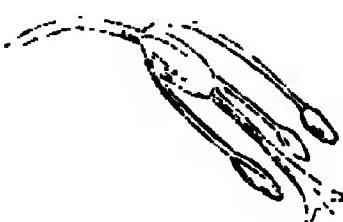
P. Very often it is. This flower-cup is called the *calyx*, and the leaves of the calyx are called *sepals*. What next?

L. Now let us look at the pretty flower. This has a ring of leaves all round it.

P. Instead of saying a *ring* of leaves, we say a *whorl*, just as you said of the green leaves which grew from one point in the stalk (page 148). The flower-leaves are not called sepals, but *petals*; and the whorl of leaves is called the *corolla*. The corolla, in this flower, contains five petals, but some flowers have many more, and some less.

You may next look at the inside parts. Suppose you pull off the petals.

W. I will pull them off. Now we can see the parts easily. Here is the solid part which the flower was built upon, and there are a number of little stalks growing upon it; the large one is in the middle, and its younger brothers are growing all round it.



Inside Part of a Flower.

P. These "little stalks" are most important parts, as you will soon see; the one in the centre is called the *pistil*, and those around it are called the *stamens*.

L. And what is this solid part, like a box, which they grow upon?

P. This is called the *ovary*, or egg-box. It contains the little eggs of the plant, which form new plants, just as the eggs of animals form new animals.

L. I suppose that you mean the *seeds*, not the eggs.

P. Yes, that would be their proper name; but they are not

perfect seeds yet; they are waiting there to be made perfect. The flower has to do this. When it has done so it will die, and the seeds will ripen, and fall out.

L. How curious! I should like to know how all this is done.

P. Well, I will tell you in our next lesson; but to-day you had better learn the name of each part. You may cut open the ovary, and see the imperfect seeds which are inside it.

Lan. Ah, here they are! How soft and watery they seem to be! But, papa, you said that they are not perfect *seeds* yet; and you have not yet told us what they are called.

P. They are called *ovules*, which word may be said to mean "little eggs"; that is a very good name for them.

L. Now, papa, we can point out the parts of the flower, and can say their names. A flower has a peduncle, bract, calyx (consisting of sepals), corolla (consisting of petals), stamens, a pistil, an ovary, and ovules.

P. You may say that a flower *may* have all these parts, for they are not found in all flowers. The stamens and pistil also have distinct parts; these we will notice soon.

When is a man less than a man?
When by misfortune stricken down
He whines and mauls through the town,
But never lifts his strong right arm
To save himself from further harm;
Then is a man less than a man;
Then we pity him all we can.—C. MACKAY.

THE TUDORS.

EDWARD VI.

Before King Henry VIII. died, he appointed his little son Edward as his successor. Edward was only nine years old, so the king ordered that sixteen noblemen, whom he named, should govern for him until Edward reached the age of 18 years. The nation, however, did not obey Henry as readily after his death as when he was alive; and they chose the young king's uncle, the Duke of Somerset, to govern.

Now the Duke of Somerset was a very good man, and as soon as he became Protector he turned his power to good account. In those days nearly all people were talking or thinking about religion. "Which is the way to serve God?" was the great question which troubled men. There were many serious men who loved God and prayed to him, and whose hearts were filled with gladness because they could read His word. And there were many fierce men, who were angry with the Pope because he had deceived them so long; they were angry, too, with all who still believed in him, and persecuted them because they could not see the truth; which was a very wicked thing to do. And there were wild men, who, now that they disbelieved the Pope, took up all manner of strange fancies instead. So most people were still much excited about their religion. They felt themselves

free from the tyranny of the Pope—they used their own minds, and they ran about here and there, telling each other the new wonders they had read in God's word.

But there were not only good men, and fierce, and foolish men, but there were wise men in those days; and it is fortunate that the Protector was one of them. He carried on the good work of the Reformation. In this he was helped by Archbishop Cranmer, of whom you have already heard. Cranmer was a wise and prudent man; he did not disturb the people by sudden and violent changes, but he made improvements gradually.

In order to establish the English Church, a council of bishops and clergymen was appointed. Many of these men were wise and good. They proceeded in their work with great care, consideration, and exactness; and, depending on God's Holy Spirit, they established all things on "the best and surest foundations."

The people still believed in the doctrine of *transubstantiation*, for you may remember that Henry had ordered them to do so. They were taught by this doctrine that the bread eaten at the sacrament of the Lord's Supper is changed into the real body of Christ. This, of course, is not true, and the council told the people so.

The council ordered the foolish practice of bowing down to images to be given up; and they also allowed all clergymen to have wives as other men have. You may remember that as far back as the time of Dunstan, the Pope had forbidden the clergy to marry. This he had no right to do, for God had never forbidden them; clergymen should have wives to help them in doing good.

In the course of time the council of bishops and clergy abolished all the doctrines of the Catholic religion which were contrary to the Scriptures, and they then prepared new forms of service. They drew up the COMMON PRAYER BOOK, which we still use, and they founded on the Scriptures *forty-two declarations*, which all true Protestants were required to believe. In the reign of Elizabeth three of these were omitted, so that now there are only thirty-nine, which we call the THIRTY-NINE ARTICLES. The three articles omitted were, 1. "The resurrection of the dead is not passed already." 2. "The soul does not perish with the body." 3. "All men will not be saved." The forty-two articles were principally drawn up by Cranmer, and they were bound at the end of the prayer-book.

The people now had in their own language the Scriptures, the thirty-nine articles, and a book of prayer. Besides these, a book of praise was also published, containing "A new version of the Psalms." The Psalms were translated by a good man named Sternhold, and

they were put into verse by a schoolmaster named Hopkins. These Psalms of Sternhold and Hopkins are not considered good specimens of verses now, but they were very useful in those days; and it was very pleasant for the Protestants to sing the praises of God in their own language.

You must not, however, suppose that all this good was done without some evil; the wisest men have never done right in all things. The council ordered a "visitation" of the churches, so that the images, and any other superstitious things they contained, might be destroyed. This order was executed with severity and injustice, like that for the destruction of the religious houses in Henry VIII.'s reign. The libraries of Westminster and Oxford were ransacked and purged of the Romish legends, missals, and superstitions volumes; these, as well as the images, were publicly burnt, but at the same time many useful books on Geometry, Astronomy, and other subjects, were destroyed, because they were said to be magical, and others were stolen because of their silver clasps and rich bindings.

The burning did not stop with the books. The Protestants were, as I told you, foolish enough to burn men also. Now that they were in power, they called the Roman Catholics "heretics," and committed several to the flames. They committed others to prison; two important prelates, Gardiner, Bishop of Winchester,

and Bonner, Bishop of London, were sent to the Tower for refusing to acknowledge the new forms of worship.

The other events of Edward's reign are not of great importance. The Duke of Somerset made war with the Scots, and determined to unite England with Scotland, by marrying young Edward to the young Queen of Scotland. The Duke, however, did not ask for her properly, so the Scots would not let her be Edward's wife. Somerset therefore tried to take her by force, and with a large army he defeated the Scots near Edinburgh. The war was concluded by a truce, but still the Scots would not give up Mary. They would not be *forced* to do so. The Earl of Hertford remarked that "he disliked not the match, but bated the manner of wooing;" and to end the matter, the young queen was sent to France, and married to the Dauphin.

The next important event was the fall of Somerset. The Protector had no doubt seen that the young king was not likely to live long; and perhaps he thought he would try to be king himself. At least he forgot his original prudence; he offended the people, and made the nobles envious by his wealth and magnificence. He pulled down three bishops' houses and the old church of St. Mury, in the Strand, to make room for a splendid palace, and he took unjust means to raise the money for building it. The palace is still called Som-

erset House. On account of this and other wrongs, he was easily overcome by his enemies. His principal enemy was John Dudley, the Earl of Warwick; he was the son of the infamous lawyer Dudley, who oppressed the people in the reign of Henry VII.; and he had now become the Duke of Northumberland. This duke accused Somerset of high treason, and at length caused him to be executed on Tower Hill.

The Duke of Northumberland succeeded Somerset as Protector, and soon aimed openly at the sovereign power. He persuaded the king and council to decree that the princesses Mary and Elizabeth should not succeed to the crown. By this means, a nobleman's daughter named LADY JANE GREY became the heiress, and to her he caused his son, Lord Guildford Dudley, to be married. After this settlement of the crown upon Lady Jane Grey, the health of the young King Edward was observed to decline every day. Northumberland dismissed the physicians, and put the king under the care of an ignorant old woman. Her medicines increased his disorder most violently, and he soon after died, in the year 1553. It has been strongly suspected, and not without reason, that the Duke of Northumberland wickedly hastened the king's death by poison.

The character of King Edward VI. was a most promising one, and his death was much regretted.

THE ENGLISH TRAVELLER.

LONDON—THE MODERN BUILDINGS.

"*DEAR CHILDREN,—*

"How it rains!" I said to my friend the morning after our visit to the ancient buildings.

"Yes, and see how heavy the clouds are," he replied; "nothing but thick leaden colour above! There's not a bit of blue sky to be seen."

"Will it rain all day?" I asked.

"I should say there is no doubt of it; so you may make up your mind to stop at home, and I will tell you of the modern buildings, while we sit here in this parlour."

"So this was agreed to, and my friend began.

"Not far from our house, and still nearer to the Monument, is a **STATUE OF THE LATE KING WILLIAM IV.** It is situated at the north of King William Street, and, with its pedestal, is forty feet high. It is made of granite.

"There are many more statues, most of which may be called modern buildings. In front of the Royal Exchange there is a statue of the **Duke of Wellington.** It is made of the metal of the cannon taken by the conqueror of Waterloo, in his various victories. It cost £9,000, besides the material, which is worth about £1,500 more."

"Yes," I replied, "I saw the statue when we were in the *Poultry*, and were noticing the

Mansion House; it was facing us."

"True; and on account of his position there, the Duke of Wellington is said to make a good farmer's wife."

"Why is that?" I said.

"Because he is always *looking up the Poultry.* Didn't you say yourself that the statue faced you when you were in the *Poultry?* That is a very old maxim."

"But the statues. There is another statue of the Duke of Wellington, in which he seems to have the opportunity of looking everywhere. He is placed on the top of the arched gateway at Hyde Park Corner, and thereby he completely spoils its appearance and his own also. He holds in his hand some important document, with which, as Commander in Chief, he seems to direct all the omnibus horses that go up and down Piccadilly, and to be setting them in battle array against each other."

"He had better "be looking up the Poultry" than doing that," I said.

"Not far from the arch on which the Duke is placed, is another statue, which is equally unfortunate, for it has been much ridiculed. This also is formed of brass cannon taken in battle by the Duke of Wellington, and is copied from a figure at Rome which is said to be Achilles. It is thought, however, that the figure only

represents some gladiator. It is in honour of the Duke of Wellington, and inscribed to him by the Ladies of England. But it is said to be very absurd that a statue of a common gladiator should be erected in honour of the Duke.

"There are other statues; two bear some resemblance to the Monument. The first is at the north side of St. James's Park, and is a plain column of granite 124 feet high; on it is a great bronze statue of the Duke of York; it was erected in 1833.

"The second column is of the Corinthian order. Instead of being plain, it is fluted. On the summit of the capital is placed a stone statue of Lord Nelson. It is 176 feet high, but the effect, on the whole, is said to be poor.

"In the best squares of London there are several statues. The most remarkable are those of Charles II., William III., Anne, George I., the Duke of Cumberland, Pitt, Fox, Duke of Bedford, and George IV. These are mostly modern. There are also the ancient statues of Charles I. at Charing Cross, and of Queen Anne in front of St. Paul's.

"Within these 20 years, three great buildings of London have been injured by fire. The old Houses of Parliament and the Royal Exchange were burnt down; and a part of the Tower. Thus, the New Royal Exchange and the New Houses of Parliament are amongst the modern buildings of London.

"The BANK OF ENGLAND

220

may be accounted as one of the *modern buildings* of London, although it is an ancient institution. It was completed in 1788, but it was not brought into its present state until the year 1825. Until then, it consisted of several different styles of architecture; so that the parts did not match well with each other.

"I cannot describe the building to you; you saw it. It is a very large place, covering eight acres. Its chief entrance is in Threadneedle Street. One of the largest rooms is a circular chamber, called the *Rotunda*. It is surmounted by a lofty dome, 57 feet in diameter. Much business is done here every day, but more on two particular days in the year, called *Dividend days*. The "dividends" are the interest of money which forms the national debt. It is paid half-yearly to the crowds of ladies and gentlemen to whom it is due.

"In the *telling-room* there is a scene of extraordinary activity all day long. Clerks are seen counting and weighing gold coins; parties going to and fro; and crowds of tradesmen, clerks, merchants, and folks of all sorts, transacting business.

"The other parts of the Bank are private; they can only be seen by means of an order from one of the directors. One of the most interesting departments is the *bullion office*. It is a *vaulted* chamber, beneath the others, and in it immense quantities of gold are often kept.

"The *Printing-office* is an-

ther interesting place. Here their salaries amount to about the bank-notes are prepared. £200,000 per annum. The office contains a large steam-engine which moves two printing machines, twelve steel-plate presses, and other mechanical works, all of which are kept in beautiful order. The paper on which the notes are printed is thin, but particularly strong. When it does not contain any size, a bank note will support 36 lbs., and when one grain of size has been distilled through it, it will support 56 lbs. The principal part of the note is printed from a steel plate, while the numbers, &c., are printed from a hand press. In 1832 there were thirty-eight engravers and printers kept in employ.

The number of clerks in the Bank is more than 800, and

hours of business are from 9 till 5 o'clock. £90,000 a-year is allowed to the Bank by Government for managing the national debt.

"The Bank of England belongs to a company of proprietors. Their affairs are managed by twenty-four directors, eight of whom go out every year, and eight others are elected. The company was first incorporated in 1674, and has certain privileges conferred by a *charter*. In 1844 this charter was renewed until 1855. The proprietors of the Bank receive every year good interest for their money."

"I remain, dear children,
Your affectionate friend,
HENRY YOUNG."

A SWARM OF BEES FROM A SCRIPTURAL HIVE.

Be quiet,—more ready to hear than to speak.
Be active,—true riches unceasingly seek.
Be patient,—devovali's good pleasure endure.
Be humble,—and so shall your path be secure.
Be prud'ful,—make known your requests unto God.
Be watchful,—for Sutai is ever abroad.
Be hopeful,—and never give way to despair.
Be loving,—and show whose disciples you are.
Be gentle,—and prove that your wisdom's divine.
Be merciful,—always to pity incline.
Be gracious,—more willing to give than receive.
Be just,—as you would not have others deceive.
Be upright,—and thus your profession adorn.
Be kind,—and treat no fellow-creature with scorn.
Be lowly in heart,—for the Saviour was so.
Belong suffering,—like him when he dwelt here below.
Be not unbelieving,—but trust and adore.
And God's grace be with you, henceforth evermorr.

SUSANNAH.

ETYMOLOGY.

CHAPTER III.

THE INFLECTIONS OF THE PARTS OF SPEECH—ADJECTIVES.

W. Here, papa, is the memory lesson which we made last Friday.

Mem. Les. 3. ETYMOLOGY.
THE INFLECTIONS OF NOUNS
AND PRONOUNS.

1. *Nouns and pronouns differ in their "gender."* Those of the male sex are said to be MASCULINE; those of the female sex, FEMININE; those of neither sex, NEUTER; and those which may be of either sex are of the COMMON GENDER. Examples: *bull, cow, boy, bird.*

2. *Nouns and pronouns also differ in "number."* Those which represent only one thing are said to be SINGULAR, while those which represent more than one are PLURAL. Examples: *man, men; foot, feet; cat, cats.*

3. *Nouns and pronouns also differ in "person."* When a noun represents a person who is speaking, it is said to be in the FIRST PERSON; when it represents a person spoken to, it is said to be in the SECOND PERSON; and when it stands for a person spoken of, it is said to be of the THIRD PERSON.

4. *Nouns and pronouns also differ in case.* A noun may be in the NOMINATIVE CASE, such as "*JOHN speaks,*" "*JOHN was spoken to;*" in the OBJECTIVE CASE, such as, "*I spoke to JOHN;*" or in the POSSESSIVE CASE, such as, "*That is JOHN's voice.*"

5. *The inflections of nouns for gender are various.* A masculine noun may be rendered feminine, (1.) by changing the word; (2.) by adding a termination; and (3.) by prefixing or suffixing a word. Examples: *bull, cow; roan, roaness; he-goat, she-goat.*

6. *There are also different ways of forming the inflections for number.* A noun in the singular number may be rendered plural, (1.) by adding s; (2.) by adding en or ren; and (3.) by changing the vowel. (4.) Some nouns are alike in the singular and the plural; and (5.) there are some which are always plural, and others which are always singular. Examples: *dog, dogs; ox, oxen; foot, feet; sheep; cattle; France.*

Lesson 18.

ADJECTIVES.

P. Adjectives, you know, express the qualities of nouns. Here is a penny for you, Ian. Tell me its quality.

Ion. I say it's a *good* thing.

P. So it is. Now, here is a shilling for you. How much of the quality "*good*" has the shilling in it?

Ion. Twelve times as much as the penny.

P. So you see that if you want to talk of the shilling, the word "*good*" will not be strong enough to describe it. It can only show that it is worth as much as the penny.

Lou. No, I must say that it is "more good."

P. That would be a more correct way of speaking. Here is a sovereign for you. Now put the penny, the shilling, and the sovereign on the table.

Lou. Here they are. The penny is *good*; the shilling is *more good*; and, the sovereign—we must say that the sovereign has *more* than *more good* in it, for it is worth twenty shillings.

W. I'll tell you what to say. Say that it is *most good*.

P. That is right. Say *good*—*more good*—*most good*.

P. What do you learn by looking at the penny, the shilling, and the sovereign?

Lou. We see, when we look at them together, that they have different quantities of the quality "*good*" in them.

P. True; or in grammar we say different *degrees* of that quality. Instead of expressing these degrees by saying *good*—*more good*—and *most good*, you may say *good*, *better*, and *best*.

W. Yes, that is what I generally say.

P. The different degrees of goodness which you see in the penny, the shilling, and the sovereign, are called "*degrees of comparison*." You may easily understand why. If you look at either by itself you simply call it "*good*." Now you know why I call the shilling *better*, when I speak of its quality.

L. Yes, you *compare* it with the penny; you also compare the sovereign with the shilling.

P. And thus, you see, we call

the degrees of quality in each adjective *degrees of comparison*. It is because we compare them together.

The adjective *good* is said to be in the *positive degree*.

But when you compare the shilling with the penny, "*better*" is said to be the *comparative degree*.

And you say that the sovereign is *best*; that word expresses the good quality in the *superlative degree*.

W. Why do you say "*superlative*"?

P. Because superlative is made from two Latin words which mean *carried beyond others*; and there is more goodness in the sovereign than in any other coin. Suppose you try another adjective. Will you give me the degrees of comparison for the adjective *great*?

L. I will. *Great joy, greater joy, greatest joy.*

L. And I noticed that you may make degrees of comparison, by making the adjectives express smaller quantities. Thus: a *little* pleasure, *less* pleasure, *least* pleasure. I think I can make the rule about the degrees of comparison now.

Rule.—Adjectives express the qualities of nouns. But nouns may have different quantities of any quality; such as, the rose is *red*, the dahlia is *redder*, the fire is *reddest*. Thus we change the adjective to show that the rose, the dahlia, and the fire have different quantities of *red* in them.

These changes are called *degrees of comparison*. *Red* is the *positive degree*; *redder*, the *comparative degree*; and *reddest*, the *superlative degree*.

BROKEN REEDS.

"Mine shall be glory," the warrior said,
As awry to the battle-field he sped ;
And proudly floated his snowy plume,
As he hied him onward to meet his doom.
"Mine shall be glory," at morn he said,
And at eve he lay with the nameless dead ;
Untold, unsung, is each daring deed :
Warrior ! thy hope—was a Broken Reed.

"They shall speak of my fame in a distant age,
I shall witeh the world with my glowing page ;
When I am low in the silent dust,
They shall rear my trophy, and carve my bust."
Minstrel ! thine is a well-sung lay,
But the world shall fling it in scorn awry ;
And the sneer of the critic shall be thy need—
Thou hast put thy trust in a Broken Reed.

"Heap higher, higher, the growing hoard,
My barns are full, and my coffers stored ;
Ha, ha ! they may call me weak and old,
But a mighty power is the power of gold ;
It shall build me a proud and a stately home."
Fool ! it shall lay thee a costly tomb ;
Vainly the learned bœch is feebly,
Thou hast pinned thy faith to a Broken Reed.

The proud sire looks on his gallant boy,
His manhood's darling, his urge's joy.
"He shall be the staff of my year's decline,
He shall be the first of a noble line."
Old man ! thou shalt live to see them spread
"Ashes to ashes" upon his head ;
The fiat is spoken, the doom decreed,
Father ! weep for thy Broken Reed.

The joy-hells ring from the ivied tower
A merry peal for the bridal hour,
Fond lips are breathing the murringe vow—
Oh ! could they be ever as fond as now.
But the carking cares of the world will come,
And frowns will darken the happiest home ;
And each may prove, in their hour of need,
That earthly love is a Broken Reed.

Yea, Gold, and Glory, and Love, and Fame,
The tale that they tell is still the same :
The best and brightest must fade and change,
And death will sunder, and time estrange.
Fix not on earth thy hope or love,
Set thine affections on things above ;
So, from the world's dark bondage freed,
Thou shalt lean no more on a Broken Reed.

PLEASANT PAGES.

JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

15th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE CALICO-PRINTER—THE SILK-WEAVER.

P. I DARE say you have often heard of Sir Robert Peel.

W. I have, papa.

P. He was a great and good man, and a good servant to his country; and the history of his grandfather, Mr. Robert Peel, belongs to our account of the cotton trade. Mr. Robert Peel was the second person in Lancashire who embarked in the business of cotton-printing.

The printing of calicoes and other cloths has been known to the most ancient nations. The ancient Hindoos and Egyptians practised it; and an account of the coloured cloths of Egypt is given by the great historian Pliny.

Although the printing of cloths is so ancient an art, and had been practised in other parts of Asia, and extended into Europe, it was not much carried on in England until the beginning of this century. Let us see why this was.

About the year 1700, a Frenchman established a small print-ground on the banks of the Thames, near Richmond. This did not flourish, principally on account of the opposition made by certain manufacturers. The silk-weavers of Spitalfields

thought, "If the nation can get printed cotton goods, they will think them prettier than our silks, and will wear them instead." About the same time that the French print-ground was opened, the East India Company were importing coloured "chintzes" from Malabar. The silk-weavers then assailed the East India House in a most riotous manner, and at last induced the Government to prohibit the Company from importing such goods.

In the years 1720, 1730, and 1744, the Parliament of England was applied to by the calico-printers for permission to print cotton goods in England; for this also had been prohibited. The silk and woollen cloth manufacturers still opposed such printing, but at last the permission was gained in spite of them, although a heavy duty was charged on all goods printed. All these things were very unfair, for everybody ought to be allowed the same chance in trade.

When, therefore, Mr. Peel began business as a calico-printer, he had great disadvantages. As I said, he was the second man who introduced

the art into the great cotton country, Lancashire; for, before then, it had principally been carried on in the neighbourhood of London.

Mr. Peel, when he took up the business, was a yeoman, furnishing his own estate. It is said that he made his first experiments in cotton-printing secretly in his own house, the cloth being ironed by a female; and his first pattern being that of a parsley leaf. When he found his experiments succeed, he began a printing establishment with his two sons, at a little village two miles from Blackburn. Here the father and sons showed the greatest industry, skill, and enterprise. The eldest son, Robert, possessed great talents for business, and in time all the sons took the lead in the business of spinning, printing, and manufacturing cotton.

In the year 1773 Mr. Robert Peel quitted his father, and set up in business with his uncle at *Bury*, near Bolton. There they carried on the spinning and cotton trade on a most extensive scale. This son of Mr. Peel afterwards became Sir Robert Peel, and was the father of the celebrated Sir Robert Peel.

The other son of Mr. Peel also established print-works at a place called *Church*, and in many other localities. These concerns branched out so widely, and were so liberally and skilfully conducted, that they brought immense wealth to their proprietors. They also trained up many of the

most successful printers in Lancashire. Thus it is said that the history of the Peels of Bury and the Peels of Church is the history of the spinning, weaving, and printing of Lancashire for many years.

You may therefore remember, dear children, whenever you read of the late Sir Robert Peel, that the country not only owe much to him, but to his father and grandfather, for the impulse which they gave to calico-printing and the cotton manufacture.

I will now tell you of another man who was almost as useful to the silk-weavers as Arkwright was to the weavers of cotton.

JOHN LOMB.

About the year 1700, a short time after the establishment of the first print-works on the banks of the Tame, great progress was made in the silk manufacturers.

You remember how the weaver of cotton cloth had trouble to procure cotton weft for his warp, and that the spinners could not spin sufficient for his use. There was even greater difficulty for the silk-weaver. When the web of the silk-worm is wound off the cocoon, it is of course not thick enough to make warp or weft; several of these thin webs have to be united together to form a sufficiently strong thread. Now, the silk-weaver in England could not get his thread prepared at the spinning-wheel by the cottagers; no one in England could prepare it for him.

The principal place where it was prepared was in Italy, for the Italians had mills for the purpose, called *throwing* mills. The process of preparing the silk threads was called "throwing," and those who performed it were called "throwsters."

At the time before mentioned the taste of the ladies of England was in favour of silk. Great quantities were therefore wanted, and it became very inconvenient to send so far for the thread to weave with. A Mr. *Crotchet*, of Derby, then thought it would be a good speculation to begin silk-throwing in England; he, therefore, opened a small throwing-mill at Derby, but it did not succeed; when his speculation failed he became insolvent. One reason for his not succeeding was, that the method of silk-throwing had been kept a secret by the Italians.

The next man who tried to introduce silk-throwing was successful; his name was JOHN LOMBE. You have, I believe, heard of him in Mr. Young's account of Derby.*

The course which John Lombe adopted to learn the business cannot be approved of. His plan was simply to *cheat the Italians out of their secret*. He set out for Italy, and when he reached there, he disguised himself, so that he might gain admission to the Italian silk-mills as a workman. This dishonest plan was also adopted in another instance by men

who discovered some secrets in the manufacture of pottery. At all events, John Lombe did not gain his knowledge openly and fairly; he bribed the workmen of the establishment to assist him, and he made visits to the mills in secret.

Lombe was a good mechanic, and a good draughtsman, so he soon understood all he saw. He made drawings of the different parts of the mills, bit by bit, and took notes on paper. At length, just as he had learned all he wanted to know, he was discovered. He was obliged to flee instantly on board a ship, or he would have been assassinated.

In the year 1716 Lombe arrived in England, and he then set up near Derby, in an island on the river Derwent. Then he built a large mill at the expense of £30,000; and the money for this he raised principally by his profits from silk-throwing while the mill was building. This showed the great perseverance of Lombe; he had machines in the town-hall of Derby, and in various other houses. These were only worked by hand, yet he made them yield him almost enough money for building his mill.

But, alas! just as Lombe reached the height of prosperity, he fell. As he had acted unfairly towards the Italians, they did so to him. He had been pursuing his profitable business three or four years, when the Italians determined on revenge. They were enraged at the loss of their trade, so they sent over an artful woman to poison him.

MONDAY.

PLEASANT PAGES.

MORAL BIOGRAPHY.

This Italian woman came to visit Lombe as a friend; she also formed a friendship with one of his Italian workmen; and they gave the unfortunate man a slow prison, so that he lingered in agony two or three years, and then died. Both the woman and man fled back to their own country.

Such is the account of one of the great improvements in the silk manufacture of England. When the English were

able to throw their own silk, it was a great public good.

The descendant of John Lombe became Sir Thomas Lombe; he acquired much wealth, and was rewarded by Parliament with £14,000.

John Lombe was not, perhaps, a very good man; but he is worthy to be remembered for the improvements he caused in the silk manufacture, and for the service he thus rendered to his country.

THE SONG OF THE RAT.

A THORNESOME pest is the bold Brown Rat,
A right cunning fellow is he;
He lives on the best, and he gets sleek and fat;
It's little he cares for the trap or the cat;
And us for the poison, he just sniffs at that,
And says, " You may have it for me."

They say that from Norway this rat was brought—
I wish he'd stopped there in the cold;
I'm sure that his company never was sought,
The timber he came with was dearly bought;
We had the Black Rat, much more easily caught,
And neither so cunning nor bold.

The bold Brown Rat! he comes everywhere,
And nothing escapes his sharp tooth;
'Neath the granary doth he make his lair,
In the roof of the barn you will find him there;
In the bairn and pantry he'll take his share—
And a pretty good share, forsooth!

He's a filthy creature, the rat so stout;
He loveth to creep and to climb
The sewer and sink-hole all about;
To gumbol and squenk in the rotten spout,
And to gnaw through the pipe, where poureth out
The foul black mud and slime.

And so cruel is he, that he even eats
The weak of his own kith and kin;
But oft in the end fit reward he meets,
And vainly before the sharp ferret retreats,
Or the owl or the hawk his affrighted eye greets,
Or he struggles the dog's grip within.

H. G. ADAMS.

CHAPTER II.

THE PARTS OF A PLANT—THE FLOWER (*Continued*).

W. HERE is another flower. We know the names of its parts—of the peduncle, the bract, the calyx, the corolla, the pistil and stamens, and the ovary; to-day we are to hear their history.

P. Let us observe the varieties of each part, before we talk of their *functions*. We will first look at the Peduncle. You have noticed where it begins.

W. It begins at the part where the leaf is joined to the stalk.

P. That part is called the *axil* of the leaf. The other end of the peduncle has one flower upon it, and it is therefore called a simple peduncle; but in many plants the peduncle is compound, that is to say, the peduncle divides into smaller

stalks; they are called *pedicels*. This is the case in the polyanthus, cowslip, lilac, &c. Some flowers have not any peduncle.

W. So we may say three things of the peduncle.

1. It begins at the axil of the leaf.

2. It sometimes supports one or more flowers, and is thus said to be simple or compound.

3. It is sometimes wanting.

P. Before we talk of the next part of the flower, you may see how differently flowers are arranged on their peduncles. Look at this collection. Most of them grow on compound peduncles.

L. What very different shapes they have!



Arrangements of Flowers on their Peduncles.

P. Yes. Let me tell you all about them.

No. 1 is a Peony. It grows on a simple peduncle, and is said to be a *solitary* flower.

No. 2 is a Fox-glove. Here we have several small flowers growing on one peduncle; so it is said to be a *spike*. The flowers of lavender, wheat, and barley are spikes.

No. 3 is the common Plantain which grows in our field, and which you feed your canary with. This also is a spike; but as its shape is always that of a cylinder, it is called a *cylindrical spike*.

No. 4 is the flower of a Poplar tree. This also is a spike, but it hangs downwards. Such a hanging spike is called a *catkin*. You have seen the yellow catkins of the willow; catkins also grow on the hazel, birch, and fir trees.

No. 5 is an ear of Oats. This cannot be called a spike, because the flowers do not grow from the peduncle. You see that they grow from small stalks on the peduncle. They are thus said to form a *panicle*. Many grasses form panicles.

No. 6 is a Heliotrope. This again is a spike, but as two spikes grow from one peduncle we call it a *forked spike*.

No. 7 is the flower of a Carrot. Here all the pedicels spring from one point of the peduncle; thus they form a spreading bunch, called an *umbel*. The flowers of parsley, hemlock, celery, the parsnip, and fennel, are umbels. You have already heard of the umbelliferous plants.*

No. 8 is a Clover-flower. This is a sort of umbel, but the little flowers form a tuft, or head. This we call a *capitulum*, which word is the Latin for "a little head." The clover, thrift, and sweet scabious are said to form a capitulum.

In the daisy, dandelion, thistle, and sunflower, a number of very little flowers (called *florets*) grow on a fleshy surface called the receptacle. They thus form a very broad capitulum. These flowers, consisting of a receptacle and florets, are said to be "composite flowers." This you have heard in your account of the composite plants.†

There are many other forms of flowers besides these. The narcissus grows in a large



a the Lime; *b* the Hellebore.

* Fireside Facts, page 127.

+ Fireside Facts, page 132.

bract, called a *spathe*, and is therefore called a *spadix*.

You will understand this when we have observed the bracts more closely, which is our next business.

W. Yes, the *bract* grows on the peduncle; it is like a leaf. I can show you one, papa.

P. I can show you two. Here they are.

In the first flower, the Lime, it is at the base, and is much like an ordinary leaf. In the second flower, the Hellebore, the bracts are at the other end of the peduncle, and surround the flower.

But there are varieties of bracts.



Involucrum.

Here is a compound peduncle, supporting three flowers. The bract on this peduncle is different in appearance from the others.

L. Yes; it is a whorl of three leaflets.

P. On account of its shape, it is called an *involucrum*. Again, in this *Narcissus*, you see a different kind of bract.

Ion. Yes; it seems to sur-

round a part of the stalk completely.



Spatha of *Narcissus*.

P. And before the flower opened it enclosed the flower-bud also. Such a bract is called a *spathe*. In the palm-trees, the spathe is even large enough to enclose a great bunch of flowers. I told you the name we give to a flower when enclosed in a spathe.

W. Yes, it is called a *spadix*.

P. Bracts not only differ in shape, but in colour. Some are of a very bright colour, like the petals of the corolla; and in a plant called the *hydrangea* they are the most showy part of the flower.

W. Then how can you always tell which is the bract?

P. You may know by its position — that is always the same; the part which is found growing between the true leaves and the flowers is always a bract. You may, however, be puzzled in looking for the bract, because in some flowers there is none

whatever. You do not see any in the cabbage, turnip, or wall-flower.

Ion. Then I will put down the "particulars" about the bracts.

1. Bracts are leaf-like bodies, differing in form and colour, yet known, because they are found between the true leaves and the flowers.

2. They differ in *shape*. Some grow at the base of the peduncle, and are much like a leaf (the lime); others surround the flowers, and are more like a calyx (the hellebore). Another consists of a whorl of leaflets, and is called an *involucrum*; another is broad, and is called a *spathe*.

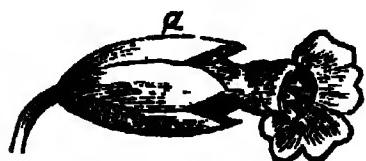
3. Bracts are generally green but they differ in colour, being sometimes even more brilliant than the flower.

P. We have now two more outside parts of the flower to examine.

L. Which are called the outside parts, papa?

P. Those we have already noticed, with the calyx and the corolla. The stamens, pistil, and ovary, are inside parts. One of the principal functions of the calyx and corolla is to protect these most important parts, which are placed inside.

W. Let us look at the calyx, papa. The calyx of this cowslip (which is marked *a*),



contains five leaves, or sepals,

as they are called; they make a famous flower-cup.

P. In some plants the calyx consists of one sepal; others have two, such as the poppy; the wallflower and the heart's-ease have four. You have often used the Greek prefixes, *mono*, one, *poly*, many, and *a*, which means without. Thus, we talk of *monosepalous*, *polysepalous*, and *asepalous* plants. We describe the petals in the same way: thus, "monopetalous, poly-petalous, and apetalous." You know, of course, what is meant by such terms?

Ion. Yes. And it is curious to notice how the flowers vary in *all* their particulars. There are flowers without peduncles, others without bracts, others without sepals, and others without petals. Are the sepals of various colours, papa, like the bracts?

P. Yes. Sometimes they are of the same colour as the petals of the corolla. In the fuchsia they are larger and of a richer colour. In the crocus the sepals and petals are of the same colour, yellow. You might thus think that the plant has no calyx; but the three yellow leaves which are outside are sepals, and form the calyx; and the three inside are petals, and form the corolla. It is the same with the tulip and lily.

L. Then I suppose that it is often difficult to know which is the corolla?

P. No, it is not. Like the bract, we can tell it by its position, which is fixed. In most flowers both the calyx and the corolla form a "whorl" of

leaves; the calyx is always the *outside* whorl, and the corolla the *inside* whorl. If you examine the lily or tulip, you will find that three of the bright-coloured parts begin lower down on the stalk than the others; thus you know that they are the outside whorl—they are the sepals. Generally, however, the calyx is of a green colour, and it may be known, because it was, formerly, the *bud-scale*, but is now expanded to protect the flower. In the grasses and corn-plants these scales which form the calyx are called *husks*.

You have already heard the use of the calyx—to protect the delicate corolla. There is a pretty yellow plant, called the *Eschscholtzia* (pronounced *Escolchia*). In this the sepals of the calyx grow together, and protect the young flowers so firmly that they will not let the corolla open. They form a sort of cap, or extinguisher. But as the corolla inside it is alive, and wants to see the light, it has no other way to get out but by *pushing off* its extinguisher. This it is able to do, because the base of the calyx is not strongly united to the peduncle.

1. But then it has no calyx to support it when it is full blown. I see now why the petals of the *Eschscholtzia* hang about so loosely, and drop off soon. I will sum up the history of the calyx.

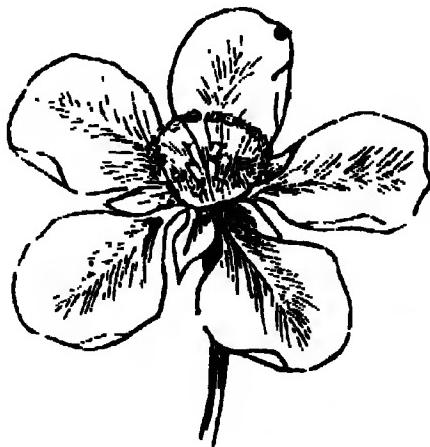
1. The **CALYX** is the flower-cup, growing at the end of the peduncle, and outside the corolla.

2. It generally consists of dis-

tinct leaves called *sepals*, arranged in a whorl like the petals of the corolla.

3. The number of sepals, however, differ. Thus, a calyx may be either *poly-sepalous*, *mono-sepalous*, or *a-sepalous*. The sepals ~~will~~ differ in colour. They are generally green, but sometimes of the same colour as the corolla.

IV. Now for the corolla! Here is a flower with a great corolla. There are some broad petals for you!



Apple blossom.

P. That is the blossom of an apple-tree, one of the rose tribe. You see that there are five petals. They do not need much description. You know that the petals are the parts which often display such gay colours, and give forth such sweet perfume. Just as the sepals of the calyx protect them, so, as we said, it is often their function to protect the delicate pistil and stamens. They guard these important organs from the changes in the weather, sometimes shutting up at night. It is thought, too, that they even prepare food for

them, just as the leaves of the plant prepare sap for the other parts. Like the other organs, they differ much in shape and colour. They also differ in number. As I said, we have poly-petalous, mono-petalous, and a-petalous plants.

Ion. I will soon make our notes on the corolla.

1. The COROLLA is the part of a

plant between the calyx and the stamens.

2. Its parts are called petals; and like the sepals of the calyx, they are generally arranged in a whorl.

3. Like the parts before described, they differ much in shape, colour, and the number of their parts.

Now we have heard of four parts of a flower.

P. And we will talk of the others next week.

"THY WILL BE DONE."

Thy will be done—a simple word,
An infant's lisping tongue might say,
Yet, oh! how rarely is it heard
From ours, in sorrow's trial day :
When those with whom life's path we trod
Have left it dark, and sad, and lone,
How hard it seems to kiss the rod,
And weakly say, "Thy will be done."
When pleasure laughs on lip and brow
The holy words are lightly spoken,
But when 'neath stern Misfortune's blow
Each flower of Hope lies crushed and broken ;
When all that bloomed around our way
Fades, ere our course be half-way run,
We scarce can school our hearts to say,
"Thy will, Thy blessed will be done."
When those—who to our home and hearth
So much of Love's own light have given,
Are taken from our hand on earth,
To join a brighter band in Heaven :
Oh ! when we watch them pass away,
Their life-strings breaking, one by one,
'Tis hard, in such an hour, to pray,
"Father ! Thy will, not ours, be done."
Oh ! Thou, who in Gethsemane,
Wrestling in mortal anguish there,
Didst, in thine hour of agony,
Breathe weakly forth this fervent prayer ;
Touch us, when on our heads descend
These shafts of woe, which none may shun,
Humbly beneath the stroke to bend,
And only say, "Thy will be done."

Canada.

R. A. P.

THE TUDORS.

MARY.

P. BEFORE we begin the reign of Mary, you may say "by heart" the lesson on Edward.

Lesson 32. EDWARD VI.

Began to reign . 1547.
Died 1553.

1. *Edward VI. was the son of Henry VIII. by his third wife, Jane Seymour.*

2. *The principal events of his reign were, the establishment of the Reformed religion; the fall of the good Protector, Somerset; and the rise of his enemy, the Duke of Northumberland, who openly attempted to gain the crown for his own son, Lord Guildford Dudley.*

3. *Edward died of consumption, in the year 1553, being in the 16th year of his age.*

Immediately after Edward VI.'s death, the Duke of Northumberland proclaimed Lady Jane Grey Queen of England. On the same day that Lady Jane was proclaimed in London, Mary was proclaimed Queen at Norwich.

The people of England would have liked Lady Jane Grey to be queen rather than Mary, because she was so much more amiable, and was a Protestant. They did not, however, acknowledge her, because they knew that Mary was the real heir to the crown. They knew, too, that it was for the sake of the Duke of Northumberland's son

that she was proclaimed queen; and no one liked the bad duke.

There was another reason why no one wanted Lady Jane to be queen, which was, that she herself did not wish it. She was not only amiable, but very clever. She could speak Italian and French, and could draw and paint; for during the time of the Tudors, the children of the nobles were very highly educated; the ladies could compose and converse in the learned languages. The young Lady Jane liked much more to study than to be a queen, and when she was told that her cousin Edward was dead, and that she was to succeed him, she fainted and shed tears. She refused the crown, saying that she had no right to it while the princesses Mary and Elizabeth were alive. The Duke of Northumberland, her husband's father, and the Duke of Suffolk, her own father, begged on their knees that she would agree to be queen, but she would not consent, until her mother and husband joined in the request; then she could not resist any longer.

But, as I said, the people saw through the Duke of Northumberland's bad plans, and the duke saw that he was found out. The proclamation of Lady Jane as queen was, in most cases, treated with scorn, while Mary soon found herself at the head of 40,000 men prepared to

fight for her rights. When Lady Jane heard of this she resigned the crown and returned to her private house, having been queen only ten days. Northumberland tried to escape from England, but he was arrested.

Mary now entered London peaceably and in triumph. The Lord Mayor, Aldermen, Recorder, and the Earls of Arundel and Pembroke proclaimed her as queen at St. Paul's Cross. A Catholic service was performed in the cathedral; beer, wine, and money were distributed among the people; a dole of eightpence was distributed to every poor householder in the City; and the public joy was shown by bonfires and illuminations.

The joy of her people was, however, turned into sorrow when they became better acquainted with Mary. They found that she was bigoted and cruel, her fierce, dark mind having been filled with superstition by her teachers, the Catholic priests. Before she had been queen a month she caused Northumberland to be beheaded, with two of his associates. Thus was he punished, not only for attempting to gain the crown, but for the death of Somerset, whom, you may remember, he caused to be executed. Lady Jane Grey and her husband Dudley were also sentenced; but, remembering their youth and innocence, and that all people loved them, Mary did not dare to put the sentence into execution. Accordingly they were allowed to

live, but were kept close prisoners.

In less than a year, however, circumstances offered an excuse for putting the young couple to death. As Mary was determined to re-establish the Catholic religion, it was thought that a Catholic husband would help her to do so. After declining two or three proposals, she cast her eye on Philip II., of Spain, who was much younger than herself; he being 27 years old, and the queen 48. He felt no love for Mary, but did not object to marry her, for he wanted to be called the King of England. When, however, the English people heard of the proposed match, the greatest alarm spread through all ranks. The members of the House of Commons strongly remonstrated, begging the queen not to marry a foreigner; the queen could only get rid of them by dissolving Parliament.

The Emperor of Germany, the father of Philip, tried to quell this clamour. He sent over £400,000 to distribute amongst the members of Parliament and others, to make them more friendly. In the treaty of marriage it was agreed that the queen only should govern, and if she died before Philip he should have no claim to the crown.

These and many more arrangements were made to quiet the fears of the people, but without success; they declared that the match was dangerous to their liberties and independence; for they should certainly

become subject to Spain. An insurrection was raised by Sir Thomas Wyatt, who set out from Kent to London with 4,000 men. On entering the City he required the queen to put the Tower of London in his hands, and to marry an Englishman at once; but he had not sufficient men to enforce his demands; his followers by degrees became afraid and abandoned him, and he was taken prisoner.

Mary now showed her revenge for this insult. Wyatt was immediately executed. Four hundred of his followers were then put to death, and four hundred were brought before the queen with halters round their necks, but they were spared. The Tower and all the prisons in the kingdom were filled with nobility and gentry. The heads of many were cut off and exhibited on poles in the streets, or on the gates of the cities. Fifty-two gentlemen were hanged on one day, which was afterwards called *Black Monday*. Mary even determined to punish her sister Elizabeth, but she happened this time to escape.

The people had hoped that

the beautiful Lady Jane Grey and her husband would be allowed to live; but Mary now pretended that they were guilty of this insurrection. She therefore ordered them to prepare for death. Dudley was executed first; Lady Jane Grey saw his headless body as it was brought back from the place of execution, but she bore the sight with fortitude. She felt the bravery of one that had done no wrong. While on the scaffold she spoke to the officers and servants, declaring her innocence; she said that she only consented to become queen to please her parents; but that as she had done wrong to her country by that act, she willingly accepted of the dreadful punishment. She then allowed her waiting-women to take off part of her robes, and laid her beautiful head on the block.

The execution of the youthful pair was performed privately, within the Tower; for it was feared that, in compassion for their youth, beauty, and innocence, the people would rebel, and try to save them. Lady Jane Grey was not seventeen years old when her head was cut off.

When is a man less than a man?
When he makes a vow he fails to keep;
When without sowing he would reap;
When he would borrow, beg, or steal,
Sooner than work for an honest meal;
Then is a man less than a man;
Then we pity him all we can.

C. MACKAY.

ETYMOLOGY.

CHAPTER III.

THE INFLECTIONS OF THE PARTS OF SPEECH—ADJECTIVES
(Continued).

Lesson 18.

ADJECTIVES (Continued).

P. Give me the degrees of comparison for the adjectives long, small, and black.

Ion. I will do it, papa—

Positive. Comparative. Superlative.

long	longer	longest
small	smaller	smallest
black	blacker	blackest.

P. What changes did you make in the adjectives?

Ion. I added *er* for the comparative, and *est* for the superlative.

P. Right. Now give me the degrees for these adjectives—red, sad, hot; and say what changes you make.

L. I will try—

Positive. Comparative. Superlative.

red	redder	reddest
sad	sadder	saddest
hot	hotter	hottest.

The change in these adjectives is not the same as in the others. Besides adding *er* and *est*, I have had to *double the last consonant* of the adjective.

P. I will point out the reason of this difference. You may notice that the first three adjectives end in *two consonants*, and the last three in *one*.

W. There! Stop, papa! I will make the rule:—We form the degrees of comparison for

adjectives ending in two consonants, by adding *er* or *est*; and for adjectives ending in one consonant, by doubling the last consonant, and adding *er* and *est*.

P. That rule is not perfect, Willie. It only shows how you waste our time by being in a hurry. Here are some words ending in one consonant, and yet we only add *er* and *est* without doubling the last consonant:—

weak	weaker	wenkest
green	greener	greenest
broad	broader	broadest.

W. Then why don't you double the consonant, papa? It's not my fault if you won't.

P. I will show you why. In each of these adjectives, the last consonant is preceded by *two vowels*; while in the others ending in single consonants, the last consonant is preceded by *one vowel*. So you may make your rule in this way—

RULE 1.—When an adjective ends with *two consonants*, we form the degrees of comparison by adding *er* and *est* to the positive.

Or, when an adjective ends in *one consonant* with *two vowels* before it, we add *er* and *est*.

But, when an adjective ends in *one consonant* with *one vowel* before it, we double the last consonant, and add *er* and *est*.

Examples—

small	smaller	smallest
fleet	fleeter	fleetest
wet	wetter	wettest.

Let us try some more adjectives. Make the degrees of comparison for *merry*, *happy*.

I. Merry merrier merriest
happy happier happiest

P. Now, the adjective *gay*.

L. Gay gayer gayest

In *merry* and *happy* we changed the *y* into *i* before we added the *er* and *est*, but I did not for the adjective *gay*.

P. That is because the word ends with two vowels instead of one. You had the same rule when making the plural of *key* and other words; you did not change the *y* into *ies*.

Will you now give me the degrees of comparison for *wise* and *loose*?

I. Wise, wiser wisest

Loose looser loosest.

In these I have only to add *r* and *st*. I suppose that that is because there is an *e* at the end already.

P. True. We will make the rules for these adjectives at the end of the lesson.

Will you make the degrees of comparison for *bad*, *little*, *much*, *far*, *good*, and tell me what you add to the positive?

I. We cannot say *bad*, *badder*, *baddest*.

P. No. The proper way is—

Positive. Comparative. Superlative.

bad	worse	worst
little	less	least
much	more	most
good	better	best
far	further	furthest.

Now make the degrees of

comparison for *beautiful*, *glorious*, *magnificent*.

W. I will—

beautiful	beautifuller	beautifullest
glorious	gloriouser	gloriousest
insignificant	insignificanter	insignificantest.

I don't think that those will do. They don't seem right.

P. No. You have not formed these degrees correctly. We do not form them with *er* and *est*, because they are words of more than one syllable. The proper way is to add *more* and *most* to the positive. Thus:

beautiful	more beautiful
	most beautiful
glorious	more glorious
	most glorious

and so on. This is the way to form the degrees of comparison for all *polysyllables*.

L. Then the rules we have been forming are only for adjectives which are *monosyllables*. So, in writing down the rules for adjectives, we will arrange them accordingly.

ADJECTIVES.

(*Monosyllables*) Rule 1.—When an adjective ends with *two consonants*, we form the degrees of comparison by adding *er* and *est* to the positive.

Or, when an adjective ends in *one consonant with two vowels* before it, we add *er* and *est*.

But when an adjective ends in *one consonant with one vowel* before it, we also double the last consonant.

Examples—

small	smaller	smallest
fleet	fleeter	fleetest
wet	wetter	wettest.

FRIDAY.**PLEASANT PAGES.****GRAMMAR.**

RULE 2.—When the positive degree ends in *y*, we form the other degrees by changing the *y* into *i*, and adding *er* and *est* (except when the *y* is preceded by a vowel).

Examples—

dry	dryer	driest
gay	gayer	gayest.

RULE 3.—When the positive ends in *e*, we form the other degrees by adding only *r* and *st*.

RULE 4—We form the degrees of other adjectives in various ways, and they are therefore called irregular, such as good, better, best, &c.

(*Polyssyllables*) **RULE 5.**—Generally, in adjectives of more than one syllable we form the degrees by adding *more* and *most* to the positive. Thus—

unhappy more unhappy
most unhappy.

P. Besides the adjectives we have mentioned, the numbers *one*, *two*, *three*, *four*, &c., are generally called adjectives, because they express the *quantity* of any noun to which they are joined. Thus—

two men four men, &c.

The numbers are therefore called *numeral adjectives*. They have not, of course, any degrees of comparison.

L. We must add another rule for these adjectives.

RULE 6.—As numbers express the quantity of nouns, they are called *numeral adjectives*, but of course they cannot be declined.

No. 19. PARSING EXERCISE.

(Mention the degree of comparison of each adjective when parsing the following exercise:—)

The cloak of the tallest man was shorter than the little boy's. He has the prettiest kite. Your kite did not cost much; mine cost more; and his cost the most. My shadow is long now, and it will be longer in the afternoon. The four boys are heavier than the three men. The most beautiful sunset shed a most glorious light on the tops of the highest mountains. The sun was more beautiful than the mountains.

IMPROVE THE TIME.

The moments fly,—a minute's gone,
The minutes pass,—an hour has run,
The day is fled,—the night is here;
Thus flies a week, a month, a year.

A year, alas! how soon 'tis past;
Who knows but this may be our last;
A few short years, how quickly fled,
And we are number'd with the dead.

Then let us present hours improve,
And bear in mind how fast they move;
That if we now neglect to learn,
The time we lose will ne'er return.

C. H. P.

PLEASANT PAGES.

A JOURNAL OF Instruction FOR THE YOUNG AND THE OLD.

18th Week. MONDAY, NOVEMBER 20, 1854.

INDUSTRY.

THE MAN WHO IMPROVED POTTERY.

By Miss H. M. KIRKLAND.

M. Do you admire this cream-jug, Lucy? I bought it to-day when I went to the china-shop to make some purchases.

L. Oh, yes, mamma! How pretty it is! Much prettier in shape and colour than the one we formerly used. Do you like it better, papa?

P. Decidedly. There is no comparison between the two; for our old cream-jug was made many years ago, and since then very great improvements have been made in pottery.

W. Do please tell us, papa. For since Lucy and I saw the fine china at the Exhibition we have often said we would ask you some questions about it; and now you mention the word "improvement," I am sure that what you can tell us will be very interesting.

P. Yes, Willie; so interesting as to make me glad of an opportunity of telling you. For Josiah Wedgwood, the great English potter, did for the improvement of earthenware what Arkwright did for cotton, and all relating to him, and the benefits he conferred upon his country, will always be of interest to English people.

L. Oh, please, papa, go on.

P. Pottery—*says* I imagine under this simple term all kinds of earthenware has been made and known in all ages. We read of the potter's wheel in the Bible, and see have proof that great skill had been required in making fine kinds of pottery in China and Japan at a very remote date. Little figures, covered with a fine blue glaze, have been found in the tombs of Egyptian mummies buried three thousand years ago; and at a somewhat later date, the Greeks, the Etruscans (a very ancient people of Italy), and then the Romans, became wonderfully skilful in the potter's art, particularly in making beautiful vases or urns, in which to place the ashes of their dead; for in those ages the bodies of the dead were mostly burnt.

But uncivilized nations, as well as those more civilized, made earthen vessels, though of wondrous material and rude in form. The ancient inhabitants of this country possessed such long before the birth of Our Saviour, and, I think, made them themselves, and the Romans, when they came and conquered the country, established potteries in Staffordshire,

that continued to exist through subsequent centuries, and through all the changes which befel England. Though such was the case, it is certain that till the beginning of the eighteenth century the manufacture was confined to a few objects of the commonest and coarsest description. But just before this time, two German brothers, named Elers, came from Nuremberg in Holland, and settled in Staffordshire. They introduced the art of glazing vessels, and tried to keep their process very secret; but it was discovered by a clever person named Astbury, who for two years feigned himself an idiot, in order to get admitted into the Elers' works and accomplish his purpose. He then recommenced his business as a potter, and about 1720 effected a great improvement in the substance of which earthenware is made, by adding to the clay burnt, or, as they are called, calcined flints. He owed this discovery, it is said, to the singular circumstance of his horse falling blind during a journey he made to London, and to his observing that the burnt flint powder used by an ostler for the cure of his horse's eyes, formed when wet a clayey substance. Yet, in spite of those improvements, the wares were very inferior; and therefore, much of the better kinds of earthenware in use, was still imported into this country from Holland, France, and Germany. But just at this time, when the need was most, JOSIAH WEDGWOOD began his great improve-

ments, and lived to see pottery as much a staple of English trade as Arkwright did that of cotton.

W. Please go on, papa, and tell us all about Wedgwood.

P. Wedgwood was born in 1730, at Burslem, in Staffordshire, where his father and several other members of his family were engaged in the manufacture of pottery. His education was very limited, for there was no public school in his native town till 1750, and scarcely one of its inhabitants knew more than just how to read and write; nor could he have had much time for self-improvement, for his father died, leaving a very small substance to his children; so, at the age of eleven Josiah Wedgwood began to work in his elder brother's shop as a thrower—that is, one who moulds the soft clay in the form desired. The smallpox, which left an incurable lameness in his left leg, so as afterwards to require its being cut off, compelled him to relinquish the potter's wheel. He then left Burslem, and for a short period entered into partnership with another potter, during which his wonderful talent for the production of ornamental pottery first developed itself.

After this he became connected with a person named Wheildon, with whom he manufactured knife-handles in imitation of agate and tortoise-shell, melon table-plates, green pickle-leaves, and similar articles. But Wheildon, deriving considerable profit from other departments of the pottery

business, was unwilling to embark in the new branches for which Wedgwood had so great a taste; the young potter, therefore, returned to Burslem in 1759, and set up for himself in a small thatched manufactory, where he continued to make such articles as I have already named. His business prospering, he soon took a second manufactory, where he made white stoneware; and a third, at which was fabricated the improved cream-coloured ware by which he gained so much celebrity. Of this new ware, Wedgwood presented some articles to Queen Charlotte, the wife of King George III., who thereupon ordered a complete table-service, desired it might henceforth be called "Queen's ware," and appointed him her potter. It was, however, from 1760 to 1762, that his most interesting discoveries took place. Six different kinds of pottery—one, a composition resembling jasper and other beautiful stones and earthenware—made their appearance at the same time from his workshop in Staffordshire, to the admiration and astonishment of all who beheld them.

He now opened a shop in London, and took a partner to conduct it. This gentleman, named Bentley, was a highly educated man, and moved not only in excellent society, but was acquainted with the most eminent patrons of art. His knowledge and taste thus vastly assisted Wedgwood in all the higher branches of his manufactures, besides procuring for him the

loan of valuable specimens of antique sculpture, vases, cameos, gems, medallions, seals, and oriental porcelain, to copy or to serve the purpose of models. Amongst others who were thus liberal to Wedgwood was Sir William Hamilton, the English ambassador at Naples, who, during his residence there from 1764 to 1800, formed a splendid collection of ancient vases, now in the British Museum. Many of these lovely relics of an immortal age of art, Sir William freely lent to our great English potter, whose ingenious workmen not only copied them to marvellous perfection, but led Wedgwood himself to make one of his greatest discoveries, that of painting on such articles *without* the glossy appearance of ordinary painting on porcelain; an art practised by the ancient Etruscans, but lost through many, many ages.

Another, and the most celebrated work of Wedgwood, were his copies of the Barberini Vase. This precious work was in the hands of the great potter a year; he made fifty copies and sold them at fifty guineas each; but the cost of their production was so great as to exceed this sum, and left him, it is said, a loser. The Barberini, since known as the Portland Vase, has now been for a considerable period in the British Museum; and though a few years since some malicious person threw a stone and broke it into countless pieces, yet modern art has restored it, it is said, without a perceptible flaw.

(Continued on page 257.)

CHAPTER II.

THE PARTS OF A PLANT—THE FLOWER (*Continued*).

W. We are going to examine the parts which papa says are so very important—the pistils and the stamens.

P. You may begin by noticing the stamens (see cut, p. 215).

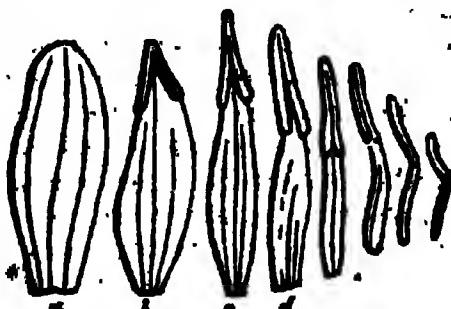
L. I notice, first, their position; they are placed round the pistil.

W. And I notice their *parts*. Each stamen has a thin stalk, with a little head upon it. Here is one by itself.

P. The stalk of the stamen is called the *filament*, and the head is called the *anther*. Let us take notice of the structure of this stamen. Botanists have examined the sepals and petals of flowers, and it has been found that they have the same structure as leaves, having veins, cuticle, and stomata. They are, in fact, *leaves*; only altered in their form and colour. This is not difficult to believe concerning the sepals and petals, but you would hardly think that the *stamens* are altered leaves.

L. No. They are so very different in their shape.

P. The change from a petal to a stamen must, of course, be very gradual; but this may be seen in several plants, such as the peony, the white water lily, and others. Here is a copy of another drawing in Dr. Carpenter's book on Botany.



Transformation of Petals of White Water Lily.

You may see in it how, as the anther gradually grows on the top of the petal, the petal gradually contracts, and becomes a narrow filament.

L. That is a very singular change.

P. Yes; and, what is more, not only do petals become stamens, but stamens also change into petals. It is in this way that single flowers become double ones. The wild rose has only one whorl of petals, and a great many stamens in the centre; but in the cultivated rose the stamens are changed into petals, so that there are several whorls; it thus becomes a large *double flower*. The difference in the wild anemone of the woods and the double anemone of the garden is caused in the same way. The stamens which form the yellow eye of the single dahlia are also thus changed.

But the stamens of flowers are not formed on purpose to become petals. Let us examine one again, and find out its functions.

When the stamen is ripe, the anther bursts. Here is an anther which has burst. What do you notice?

L. That a sort of yellow dust has come out of it. This is the part we call *pollen*. I have seen the bees loading themselves with it.

P. This pollen from the anther is one of the parts which, I have told you, is so important. Although it is so fine a dust, you may examine each little *grain* with a microscope. It is then seen to be nearly globular in shape. Inside it there is a fluid, in which are extremely minute *granules*.

L. They must be very small.

P. Yes. The granules are so small that a powerful microscope is required to see them with. They may be seen moving about in the fluid inside the grain of pollen.

W. Now I will say the parts of the stamen. It has a filament and anther. The anther contains yellow grains, called pollen, and the grains of pollen contain little granules. What are they called, papa?

P. They may be called the *germs*. Let us now examine the pistil. Here

is a drawing of the pistil. How many parts do you notice in it?

L. I see three. There is the part at the bottom, which you called the *ovary*, the stalk growing upon it, and the head on the stalk.



The Pistil.

P. The stalk and head of the pistil have different names from those of the stamens. We call the stalk the *style*, and the head the *stigma*.

Pistils, like the other parts, differ in their number and shape. Here is a drawing of a pistil with five styles. The



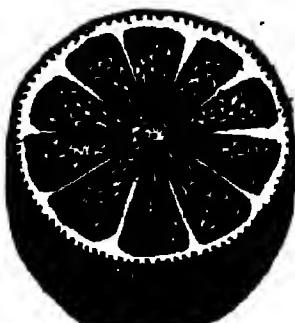
Compound Pistil.

ovary also is, you see, divided into five parts. These parts are called *carpels*. Sometimes we call each carpel, with the stigma and style upon it, a pistil.

L. Thus we may either say that there are five pistils, or, that there is a compound pistil with five parts.

P. Each carpel, however, is a distinct ovary, and contains ovules. An *orange* is a large ovary. The eyes of the orange show you where the flower once grew. On opening the orange, you will notice its different parts, which are separated from

each other only by a thin skin.



Orange.

W. Yes, I always divide an orange into those small parts.

P. These parts are *carpels*, and inside each carpel you will find a seed.

Ion. You said, papa, that you would tell us why the little ovules are not called seeds.

P. I did; these ovules are only *unfinished* seeds. You may open the ovary of this flower and examine them.

W. Here are several unfinished seeds.

P. I will put this into the microscope. Now examine it.

W. I see that the ovule is not quite closed up. There is an opening in it.

P. That is left so that something else may be added. That "something else" is the *germ*—the very small part which will shoot up and form the young plant, when the seed is placed in the ground. Where do you think these germs come from?

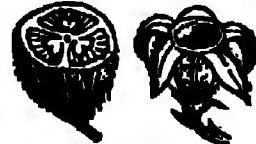
Ion. I remember! They come from the stamens. You said that the granules inside the grains of pollen were called germs. But how can they travel all the way from the top of

the stamen to the inside of the ovary?

P. In a singular way. When the stamens are ripe, the *pollen* of the anther falls on the *stigma* of the pistil. The style of the pistil is hollow, and the grains of pollen force themselves in a curious way down the style into the ovary. Here

the germs are received into the unfinished seeds, and the openings in the seeds close. The seed then ripens, but it cannot do so unless it has received one of the germs; therefore, without the germ from the pollen of the stamens, the seeds would be useless.

When the seeds have ripened the seed-vessel opens, and the seeds fall out. Here is a drawing of an unripe and a ripe seed-vessel.



The ripe seed-vessel, you see, is empty.

L. Now I see, papa, why the pollen on the stamens is so important. There could be no perfect seeds or new plants without it.

W. And now I see why papa calls the flower an *organ of reproduction*. But it seems to be quite a chance whether any of the pollen from the stamens may fall on the pistil. How is that managed?

P. The parts are arranged so that it seldom fails to happen. The stamens are generally taller than the pistil in the upright flowers; while in flowers that hang down, in bell-shaped flowers and others, the pistil is longer than the stamens, and hangs below them. You may notice this in the first flower which we examined (see p. 214). Thus in either way the pollen is almost certain to be carried to the pistil. Sometimes it is carried to the stigma by the wind, and sometimes in a more singular way. You know that the bees visit the flowers and load themselves with pollen. In moving about from one part of the plant to another, they frequently rub some of the pollen they have collected on the stigma, which is sticky.

L. That is a very curious way, but how is it known, papa, that such little things as the granules in a grain of pollen are the germs of a new plant?

P. By the help of a microscope. It has been seen that the imperfect ovules have not any germ within them, and when the pollen descends the style of the pistil, and enters the ovary, they *may be seen entering* the ovules, through the little openings which you noticed.

One more particular about the stamens, and we will finish the account of the flower. Stamens, like the petals and sepals, differ in their number. There may be some *hundreds* of stamens in a flower; there may be *twenty*, there may be *none*. It is so with the pistils; there are

some flowers which only bear pistils, and others which have no pistils.

The pistil-bearing flowers are called *pistilliferous*, and the stamen-bearing flowers are called *stameniferous*.

Ion. But suppose, papa, that a flower has no stamens, where does it get pollen from to perfect the seeds?

P. Do you not remember the bees?

W. Oh, yes. If the bees come to look for honey in a flower that has only a pistil, and they happen to be carrying any pollen on their legs, it will rub off on to the pistil.

L. But suppose there are no bees in the neighbourhood?

P. Again, you must not forget the *wind*; that also helps to carry the pollen. When a plant bears both kinds of flowers, the stameniferous flowers are generally on the upper part; and as the anthers shed their pollen, it falls on the pistilliferous flowers below.

But there are some plants which flower under water. How is the pollen to be carried from one flower to another, then?

Ion. I do not know. I should think it cannot be carried in the water; it would be lost. The fishes would not carry it; and the bees, they would not go under water.

P. No; it is necessary that the flowers should *rise above the water*, into the air, and they do so. They therefore have spiral stalks (screw-shaped), which rise up like a spring; the stalks hold the flowers

above the water until the wind or the bees have carried the pollen; the spring of each stalk then gives way, and draws the flower down again, for the seed to be ripened under water.

W. I wonder how they know when it is time to go down?

Ion. And so do I.

P. Plants cannot know. There is a God who knows and arranges all things; God arranges this for them. There are other water-plants which rise by means of bladders.

W. We shall not have time to write our "lesson" on the flowers to-day; but I would like to make the notes on the stamens and pistil.

1. The STAMENS are parts of the flowers, formed from the petals of the corolla. They are placed between the corolla and the pistil,

each consisting of a stalk and a head.

2. The stalk of a stamen is called the *filament*, and the head the *anther*. The anther contains yellow grains, called *pollen*, in which are minute granules called *germs*.

3. Stamens differ in their number. Some plants have no stamens; those which have are called "stameniferous."

L. Now I will make the notes on the *pistil*.

1. The pistil is the centre of the flower; it contains three parts—a base, a stalk, and a head.

2. The base is called the *ovary*, and contains imperfect seeds, called *ovules*. The stalk is called the *style*, and the head the *stigma*. The stigma receives the pollen from the stamens, which is passed down the style to the ovary, where it perfects the seeds.

3. Plants bearing pistils are called "pistilliferous" plants.

THY WILL BE DONE.

How sweet, to be allow'd to pray
To God, the HOLY ONE;
With filial love and trust to say,
"O God, thy will be done."

We in these sacred words can find
A cure for every ill;
A calm to soothe the troubled mind,
And bid all care be still.

Oh, let that will, which gave me breath,
And an immortal soul,
In joy or grief, in life or death,
My every wish control.

Oh, could my heart thus ever pray,
Thus imitate thy Son;
Teach me, O God, with truth to say,
"Thy will," not mine, "be done."

THE TUDORS.

MARY.

Soon after the rebellion of Wyatt, and the execution of Lady Jane Grey, Mary was married to King Philip of Spain. No sooner did Philip find that he was not acknowledged as King of England, than he showed that he had no affection for his wife. He passed most of his time in the Netherlands, taking no notice whatever of Mary, except to write to her whenever he wanted money.

But the most important events of Mary's reign were the measures for restoring the Roman Catholic religion, and the cruelties that followed.

Mary began by ordering that no person should preach without her special licence. Most of the foreigners who were reformers soon after left the kingdom. In the same year two bishops were sent to the Tower for not kneeling at the public mass, which was celebrated with all pomp and ceremony before the two Houses of Parliament. The Archbishop of York was sent to the Tower, the Protestant bishops were excluded from the House of Lords, and an act was passed abolishing the liturgy which, I told you, Cranmer and the bishops had prepared in Edward's reign. When this liturgy was first published it was said to have been written by the inspiration of the Holy Spirit, but, at the same time, it was forced on the people

by act of Parliament. Now it was again removed by act of Parliament.

Again; in this, the first year of Mary's reign, an act was passed prohibiting the breaking of images; and a council of clergy proclaimed once more that the doctrine of transubstantiation was true.

You may remember that in Edward's reign the priests were allowed to marry; but in the year 1554 the queen gave orders that the church should be purged of all married bishops and priests. Out of 16,000 clergymen then in England the greater part were turned out of office for having wives.

In the year 1555 the dreadful religious persecutions of Mary's reign were begun. So much cruelty was practised that the queen received the name of *Bloody Mary*. In the reign of Edward VI. Bonner, Bishop of London, and Gardiner, Bishop of Winchester, were committed to the Tower for resisting the Reformation. They were now at liberty, and, aided by the queen, they took vengeance without interruption. The queen herself had been persecuted in the reign of Edward VI., for she had been forbidden to hold mass in her chapel.

The first important martyr was a clergyman belonging to the great cathedral of St. Paul's. His name was John Rogers. He would not profess to believe

in doctrines which he knew were not true, for he feared to make God angry. He chose rather to die. The bishops, therefore, sent him to Smith-field, where he was tied to an upright post, and faggots were placed all round him and lighted; thus he was burnt to death. On his way to execution his wife and ten children met him and kissed him, and took leave of him, for Gardiner would not let him see them while he was in prison.

The next martyr was Hooper, the Bishop of Gloucester. He died praying to God, and teaching the people around him. With his last breath he thanked God for helping him to speak the truth, and keep his commandments.

The Bishops Latimer and Ridley were next burned at Oxford; to shorten their sufferings bags of gunpowder were placed round their necks.

The celebrated Archbishop Cranmer, whom you heard of in the reign of Henry VIII., was the last great martyr. He died in great agonies, but trusting in God. The death of so venerable a man as Cranmer, who was so well known, and had so long served his country, filled the nation with horror. They were certainly not likely to be brought back to the Roman Catholic religion by such means. There were altogether nearly 300 persons burned in this dreadful reign, including five bishops, and twenty-one clergymen.

To please her husband Philip,

the bad Queen Mary entered into a war with France. In this war the town of Calais was taken from the English; it had belonged to the nation since the reign of Edward III. The loss filled the kingdom with complaints, and their queen with despair. She was heard to say, that when she died the name of Calais would be found engraven upon her heart. She did die in the following year, 1558, after an unhappy reign of five years. Her death was caused by dropsy.

Lesson 33. MARY.

Began to reign . . . 1553.

Died 1558.

1. MARY was the daughter of Henry VIII., by his first wife, Catherine of Arragon. At the beginning of her reign the Duke of Northumberland attempted to place Lady Jane Grey on the throne in her stead, but failed.

2. The principal events of Mary's reign are—her cruel execution of Lady Jane Grey; the rebellion of Wyatt; her marriage with Philip of Spain; her attempt to restore the Catholic religion; and the cruel persecutions, in which she was assisted by two bishops, named Bonner and Gardiner. The Protestant clergymen, Rogers, and the Bishops Hooper, Ridley, Latimer, and Archbishop Cranmer were amongst the principal martyrs, who numbered altogether nearly 300.

3. The loss of CALAIS, which had belonged to the English for 200 years, was another event of this reign. Mary died in the next year, 1558.

ETYMOLOGY.

CHAPTER III.

ON THE DIFFERENT KINDS OF PRONOUNS.

P. Let me try whether you have remembered our first lesson on the Pronouns. What is a pronoun?

L. A pronoun is a word which is used instead of a noun.

P. We had a second lesson on pronouns; on their person, gender, and case.

W. Yes. We learned that their person, gender, and case are formed in the same way as in nouns.

P. To-day we will learn of the different sorts of pronouns. I will repeat some sentences to you. Will you listen, and tell me whether they contain any words which are like pronouns?

The book which John lost is found.

This is the house that Jack built.

Here comes the man who has a wooden leg.

The man and horse that we saw yesterday.

The sheep which graze in our meadow.

Ion is the boy whom I like best.

Now, in these sentences there are certain words which were not mentioned in our lesson on personal pronouns, yet they are like pronouns.

Ion. Yes. In the first sentence there is the word "which"; it means "the book," only it is not used instead of it, for the word book is just before it. And you could not say "the book book John lost."

P. No, you could not. The

word which means "the book," as you say; only it does not stand instead of it. It merely relates to the book, if you can understand what I mean.

W. Yes, I think that is very easy. In the next sentence, "This is the house that Jack built," that, relates to the word house before it.

L. And in the next sentence, "The man who has," &c., who relates to the man. And in the next, "The man and horse that we saw," that relates to the man and horse.

P. As you see that these words relate to the nouns before them, you may easily learn their names. They are called "relative pronouns."

Ion. The relative pronouns seem to be very dependent indeed; they cannot be used without the nouns which they relate to.

P. Yes. Each of the relatives mentioned has a word before it. This word is called its *antecedent*. It is so called from two Latin words, which mean "going before." Every relative pronoun requires an antecedent, except one.

L. Which is that, papa?

P. You may easily find out. Tell me the relative and antecedent in this sentence.

This is the thing which I have been looking for.

Ion. Thing is the *antecedent*, and which is the *relative pronoun*.

P. Sometimes we say "what,"

instead of "the thing which." Thus:

"This is *what* I have been looking for."

W. What is the relative in that sentence, but I do not see any antecedent.

P. No. "What" is the antecedent and the relative also; it stands for the noun *thing*, and for *which*. "What" is the only relative pronoun that can be used alone, unless you use one of the compound relatives.

L. Which are the "compound relatives," "papa?"

P. Certain words formed by adding *ever*, and "*soever*", to the relatives. Thus, *whatever*, *which-ever*; *whatsoever*, *whichsoever*; these are often used without an antecedent.

Ion. I will count up the relative pronouns we have noticed; *which*, *that*, *who*, and *what*, and their compounds, made by adding *ever*, or *soever*. When are we to use *which*, and when are we to use *who*?

P. *Who* is used (as you will see in the example) after a person. *Which* only relates to things and to the lower animals.

But in some sentences there may be two antecedents. In the following sentence one antecedent is a person, and another an animal.

The man and his horse that we saw yesterday.

If the relative pronoun *who*

were used, it would not agree with the antecedent, "horse"; and *which* would not agree with the antecedent, "man"; therefore we use the relative *that*. You will notice, too, in the PARING EXERCISE, that the word *that* is used after either persons or things.

W. Have relative pronouns different cases, *papa*, as the personal pronouns have?

P. Yes. If an action is done to the antecedent, so that it is put in the objective case, the relative must be in the objective also.

Thus, you must not say, "The man *who* we love;" but "The man *whom* we love." *Who* also has a possessive case, thus—

"The man *whose* horse we saw."

You may now write the particulars of the relative pronouns.

DEFINITION.—There are certain pronouns which are not used instead of a noun, but are placed after it, because they relate to it, such as *who*, *which*, *what*, *that*, &c. They are called RELATIVE PRONOUNS. The noun to which the relative is joined is called its antecedent.

Who is used after a person; *which* is used after a thing or inferior animal; and *that* is used after both persons and things, or either. *What* is both an antecedent and relative.

EXAMPLES.—The boy *who* won the prize. The pig *which* the butcher killed. The girl *whose* mother is ill. The nobleman *whom* we respect.

No. 20. PARING EXERCISE.

I have bought the horse which won the race. The man who came to mend the copper which burst yesterday has called again. I saw the lady and her lapdog that he painted yesterday. Is this the soldier whom you saw? Where are the sheep that were lost? Here are the horses which were bought at market.

THE FOREIGN TRAVELLER.

ITALY.

"MY DEAR CHILDREN,—

"In my last letter I did not finish the account of Italy. You heard something of its position, its climate, and its productions, but I did not mention the rivers of the country.

"RIVERS.

"The principal rivers of Italy are,—the Po, the ADIGE, and the TIBER. The Po is the largest; it has been called the prince of the Italian streams. It has also been called *Bodincus*, which means 'the bottomless.' The Adige is almost as large as the Po. The Tiber is smaller, but of greater importance, because the great city of Rome is situated upon it. It rises in the APENNINES, a range of mountains running through the centre of Italy; forming, as it were, the backbone of the country. On the whole, Italy has not many or good rivers.

"As you know the productions of Italy, you can tell what sort of commerce there is likely to be. You can almost imagine what sort of goods the Italians make, and what they buy and sell.

"And then, if you know what rivers and shores there are, you will know where to look for the large towns, for the sea-ports, and the river-ports. We will talk to-day of the commerce, and the towns of the country.

"COMMERCE AND MANUFACTURES.

"I said that the vine grows in Italy, so that you might suppose one of the articles of commerce to be wine. So it is; but the wines of Italy are not good. There are mountains with nice slopes where the vines may be nicely exposed to the sun, and there is, as I told you, a fine climate. Yet the wines are not good. This is because the people are careless. They take no care to separate the different kinds of grapes; they often gather them before they are ripe, and they are not nice or clean in making wine. It is said that the wine is often spoilt before it has left the vat.

"The oil of the olive is an article of great commerce.

"Silk is another article which the Italians sell. They produce more silk, and better, than any other country: but it is sold in a raw state; for the manufactures of Italy are now very few. The greater part of the silk is manufactured in France.

"Straw is also sold in Italy. The straws of Tuscany were once very fashionable for making bonnets, and some kinds were worth their weight in gold. You have, I dare say, worn a Leghorn hat or a Tuscan bonnet. The straw, however, like the silk, is exported in a raw state. It is said, that two acres would

furnish straw enough for all the bonnets made in Tuscany.

"The principal manufactures of Italy are those which require skill and taste. The people are celebrated for articles connected with the fine arts. The barometers, spectacles, telescopes, and mirrors of Italy are very good. The Italians are, however, more renowned for their taste in the fine arts themselves. Paintings and statues are the glory of Italy. The Italians are also famous singers and dancers.

"You now know what is the commerce of Italy; let us next see where it is. Before you look for the cities you had better understand the different divisions of Italy.

"THE DIVISIONS OF ITALY.

"Italy may be divided into three great districts. The northern district, the greater part of which may be called *Austrian Italy*; the middle division, which belongs principally to the Pope, and may be called *Papal Italy*; and the southern division, which is called the *Kingdom of the Two Sicilies*.

"But perhaps you would rather have the divisions marked out more exactly; I may therefore tell you that there are nine principal states, independent of each other.

"These are their names:—

"The KINGDOM OF SARDINIA. Capital, Turin.

"The LOMBARD-VENETIAN KINGDOM. Capitals, Milan, Venice.

"DUCHY OF PARMA. Capital, Parma.

* "DUCHY OF MODENA. Capital, Modena.

"DUCHY OF LUCCA. Capital, Lucca.

"GRAND-DUCHY OF TUSCANY. Capital, Florence.

"REPUBLIC OF SAN MARINO. Capital, San Marino.

"PAPAL STATES. Capital, Rome.

"THE TWO SICILIES. Capital, Naples.

"Nearly all commercial towns are either river-ports or sea-ports; so, if you will get your map, you may find the towns of Italy as I name them. We will begin at the north, in *Austrian Italy*.

"VENICE.

"Venice is one of the most wonderful cities in Europe. You might almost think that it is in the midst of the sea, for the houses have water all round them. The roads between the houses are water, so there are no places for riding. Instead of coaches, there are boats to float up and down, which are called *gondolas*.

"But the houses do not float; they are built on little sandy islands under the water. Great piles of wood are driven into the water, for the houses to rest upon, just as when a bridge is built. There are 72 of these islands in Venice.

"Most of the canals between the houses are very narrow; but the principal one, the Great Canal, is broad, and flows through the middle of the city. In one part a bridge is thrown over it, consisting of a single broad arch, which is 90

feet wide. This famous bridge is called *the Rialto*. There are about 500 bridges in Venice; most of them are only single arches.

" You would think it very strange if you lived in Venice. In many of the houses the canal flows close to the walls of the houses; so, if you stepped out of the door, or if you fell out of the window, you would fall into the water; but most houses have a door which opens into the streets, where there is dry land. There are no horses or large animals in Venice—there is no place for them."

" The buildings in Venice are very splendid. It is full of palaces, and many are built of marble; for Venice was once one of the richest cities in the world. There is also a dark dreary prison. It is called the state prison. It has only a narrow canal between it and the grand palace, where the duke, or doge, lives. The walls of the prison are as black as ink, and it is joined to the ducal palace by a gloomy bridge, called *the Bridge of Sighs*. It may well be so called, from the sighs and groans which the wretched prisoners make from their dark cells. Each cell is about 9 feet square with a round hole of 8 inches diameter. Through this hole the prisoner receives his daily allowance of 12 ounces of bread and a pot of water. The only furniture of the cell is a little straw and a small tub."

" Venice was once a very important city, but it is not so now. Large and splendid mir-

rors and coloured glass beads are still manufactured there.

"GENOA.

" This also was once a great city. It is very ancient, but it does not seem to be so. It is said that its white buildings, rising above one another, have a magnificent appearance. Thus it gained the name of *Genoa*, which means 'the stately.' The streets, however, are very narrow. There is no room for carriages, except in two streets, so the people ride in sedans.

Genoa still has a good trade, particularly in *velvet*. Genoa velvet is worn in England.

"PISA.

" You may remember Pisa whenever you eat green peas. It is said that those vegetables were so called because they were first cultivated in Europe near that city.

" At Pisa there is a very high and curious building, called the *leaning tower*; it is higher than all the houses, and is a strange sight. If you looked at it you might think that it would fall."

" We may say of Pisa, like the other two cities, that her days of glory are gone by.

" VENICE, GENOA, and PISA were once the great commercial cities of the world. This was in the times called 'the middle ages.' Then these cities were crowded with busy manufacturers, who made splendid silks, damasks, velvets, ribbons, and silk stockings. They also made the finest gold and silver bro-

eades, and other articles which I have before mentioned.

"There were not only manufacturers, there were wealthy merchants in those times. The riches of those merchants was enormous. Their fleets of merchant-ships covered the Mediterranean. Without a rival they rode triumphant over all seas. Why was this? It was chiefly because of the position of the cities. If you look at the map; you may see the gulfs of Genoa and Venice. This part was on the highway between the nations of Europe and the East. Thus all the riches of the world were brought by way of these cities.

"Then, why did their commerce decline?

"One man ruined their trade; his name was VASCO DE GAMA. He discovered a passage round the Cape of Good Hope. Then there was a new way to India. Goods could be sent to India or brought from there in one ship, instead of travelling partly by land and partly by water. This new way was cheaper and better; so, in time, the great cities of Venice, Genoa, and Pisa were forsaken.

"BOLOGNA.

"BOLOGNA is also a large

city at the north of Italy. Like Pisa, it has a leaning tower.

"TURIN, MILAN, and MANTUA are all great cities.

"PADUA is another great city. There is a railway from Padua to Venice..

"LEGHORN is a large port on the Gulf of Genoa, and still has a great trade.

"FLORENCE, the capital of Tuscany, is a beautiful place; it has a fine cathedral, and so have most of the other cities. MILAN cathedral is even finer than that of Florence. Most of these cities also have universities; for, once, their learning was almost as famous as their commerce. The university of Bologna is the oldest.

"In my next letter, dear children, I hope to tell you of the other cities of Italy. Will you be sure to look on the map for those I have mentioned? You will find them all in the northern district. They are a most celebrated group of cities, and you may remember them for what they once were. In the "middle ages" they held up their heads proudly as the mistresses of the world.

"I am, dear children,

"Your affectionate friend,

"UNCLE RICHARD."

WHEN is a man less than a man?
When he leads or drives his friends
To danger, for his selfish ends,
And leaves them in the evil day,
To stand or fall, as best they may;
Then is a man less than a man;
Then we pity him all we can.—C. MACKAY.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

17th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO IMPROVED POTTERY (*Concluded*).

BY MISS METEYARD.

P. Let us continue Wedgwood's history.

Countless other works of art came from his hands. He made a set of chessmen of porcelain; and his cameos, that is, beautiful gems for rings and brooches, having raised figures on a flat ground, were so esteemed by foreigners as to be eagerly purchased and placed in their cabinets amidst the most splendid specimens of Sevres and Dresden china. Indeed all this class of Wedgwood's productions were so exquisite, as to be at this day of exceeding and increasing value, and to cause them to be often sold at three times their original price.

W. I suppose, papa, Mr. Wedgwood must have improved his education. No ignorant man could have done so many things—and so well.

P. Certainly not, Willie. Wedgwood, like Brindley, had extraordinary natural talents; and, like Watt, greatly improved them. Nor was his great success in life owing to any discovery accidentally made, but arose out of patient search and untiring effort. Indeed he

must have done much for himself, for he became an excellent chemist, wrote some admirable papers for a philosophical journal of the day; as well as a short history of the Barberini Vase. He was, moreover, an eminently practical man. He invented an instrument to measure heat, since superseded by more modern inventions; built fine workshops; good dwelling-houses for his potters; which eventually formed, with his own mansion, a small town, that he named Etruria, after the celebrated Roman state of antiquity. He also greatly aided the formation of a canal that connected the rivers Trent and Mersey; and which, before the days of railroads, was of vast importance to the trade of the district. But what, perhaps, more than all else I have named, shows Josiah Wedgwood to have been a really *great* man, was his sense of merit in others. True ability not only likes to trust in its own strength, but even to make use of the power of others; and thus Josiah Wedgwood will always be memorable for having

employed the genius of John Flaxman, the great English sculptor. Some day I may have an opportunity of telling you all about Flaxman, but this much I may say now, that he made designs for Wedgwood for full seven years; and many of them were equal in beauty to the figures he afterwards chiselled out of marble.

Wedgwood at length became so famous, that visitors from all parts and all countries crowded to see him and his works; and, after reaping an ample fortune, and vastly promoting the commercial interests of his country, he died in January, 1795, in the 65th year of his age. He was made a member of several learned societies, and his private life is said to have been as pure and exemplary as his public life was noble; and he is said to have used his ample fortune as the good and noble always use the money and advantages that are theirs.

W. Can you tell us, papa, if there have been any great English potters since Wedgwood?

P. None, perhaps, so distinctively great as he. But Mr. Spode, who made some fine improvements in the manufacture of porcelain, was a very clever man; and now Alderman Copeland, Spode's successor, may be called the Wedgwood of our day; for though Mr. Minton disputes with him the priority of the invention of statuary porcelain — that is, the beautiful material with which those lovely statuettes I showed you at the

Exhibition were formed, and which you thought were marble — yet in the employment of fine artists for his work, and in his continuous efforts to improve all descriptions of English pottery, he stands without a rival.

W. Yet other countries have nice potteries — have they not, papa? For in the great aisle of the Crystal Palace there were the portraits of the Queen and Prince Albert painted on china; and mamma showed Lucy and me in another place a lovely camellia japonica made of china.

P. True, Willie. Those china portraits were made and painted at Sevres, in France, and the beautiful flower at Dresden, in Saxony. But both these are Royal potteries, supported by kings and governments, who pay all the cost of such extraordinary productions. Yet, with the exception of costly things so produced, our English fictile wares stand unrivalled, both for durability, cheapness, and beauty; and instead of *importing* foreign wares for the use of this country, as we did less than a century ago, we *export* to nearly *all* countries in the world an enormous and yearly-increasing amount of china and earthenware. In 1845, the annual value of these exports was £828,084; and as the declared value made by the merchant is always one-fourth less than the true value, we may presume that the present value of our exports in this year, 1852, is as much as *one million four hundred thousand*

pounds. And this amount will go on increasing as population spreads over the great continents of North and South America and Australia, without reckoning that *at home* our wants of what is nice and cheap, and beautiful and useful at the same time, will increase, too; for if a Staffordshire potter of the present day can in a given time produce *four* times the quantity of earthenware he would in 1790, so does the education of the people multiply four-fold their need of all which aids cleanliness and comfort. For the most noticeable part of human improvement is, that it clothes with beauty many of the most useful things of daily life, and thus gives to the poor and lowly new means of refinement, comfort, and well-being. I believe the day will come when beautiful pottery will adorn every humble thrifty

kitchen throughout the land, as well as shine upon the tables and in the chambers of the great.

L. That will be very nice, I think, papa; for I read the other day that "nice things breed nice manners," and I am sure I have noticed that poor people always behave best when they sit round the holiday table, and drink tea out of the best tea-things.

P. You are right, Lucy. I am glad you have noticed this point; it will be of service to you to remember in relation to other things.

W. I am sure I shall always remember about "the man who improved pottery," as well as I shall remember about Arkwright and Watt.

P. Do so, Willie. For the Great Exhibition of last year may give rise to some new Wedgwood, as most assuredly it will to new and vast improvements in English pottery.

SONG OF SPRING.

Ye call me, ye call me, the green buds are swelling,
The squirrel looks forth from his warm winter home;
The streams from their fountains in music are welling,
And ye look from the mountain and bid me to come.

The small birds are twittering, the young grass is springing,
The first early flower from the cold earth peeps out;
The gay fly through the sunshino his bright path is winging,
And the glad child pursues him with laughter and shout.

Hark! heard ye my minstrel, the busy bee, humming.
As he snatched the first kiss from the half-opened flower,
And many a wild note proclaiming my coming,
That was silent and still through each long winter hour?

I come with a bright wreath of buds in my bosom,
I shall strew them profusely wherever I roam;
The glad earth shall be decked with full many a blossom,
And shall laugh out my welcome—I come, yes, I come.

Canada.

CHAPTER II.

THE PARTS OF A PLANT—THE FLOWER ; THE SEED.

W. We have written our memory lesson on the Flower, papa. Please hear us say it.

Memory Lesson 5. THE PARTS OF A PLANT—THE FLOWER.

1. *The flower differs from the organs before mentioned in having the function of reproduction. It forms the little organs called seeds, which contain the germs of new plants.*

2. *The flower grows from the axil of the leaf; and its stalk is called the PEDUNCLE. On the peduncles there are often found small organs like leaves, which are called BRACERS.*

Flowers are arranged differently on their peduncles; thus we have the various forms of the tuft, spike, catkin, panicle, umbel, &c.

At the end of the peduncle are the most important parts of the flower, namely—the calyx, the corolla, the stamens, and the pistil.

3. *The CALYX consists of leaves which are called "sepals"; they are generally arranged in a whorl, and form a flower-cup which serves to protect the bright-coloured part of the flower.*

4. *The COROLLA consists of leaves which are generally of a bright colour; they are called petals. The principal function of the petals is to protect the stamens and pistil, which they surround.*

5. *The STAMENS are situated*

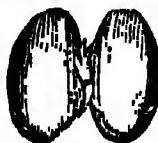
inside the corolla, and are very important organs. They consist of two parts—the filament and the anther. The anther contains a fine dust called pollen.

6. *The PISTIL is the centre of the flower; it consists of three parts—the ovary, the style, and the stigma. The stigma is the head of the pistil; it is sticky, in order to receive the pollen which falls upon it from the stamens. The style contains tubes through which the granules of the pollen pass into the ovary. The ovary contains minute organs called ovules; into these ovules the granules of the pollen enter, and each forms the germ of a new plant. When the ovule has received the germ it becomes a perfect SEED, which organ will next be considered.*

P. Let us look at the Seed, then. You see that the principal function of the flower is to form seeds. They are more important organs than the flower itself. You have seen many kinds of seeds. Mention some.

W. Peas are seeds, and so are beans, and lupins. I am going to sow some lupins in my garden to-morrow; shall I run and fetch one?

P. Yes, and I will open it for you. You see, now that I have opened it, that the seed divides into two parts.



*I*on. I have noticed that before. Beans, and peas, and acorns divide in the same way.

P. But there are three parts to the seed. Besides the two large lobes, there is a small part situated between them. This is the part which you heard of in your account of the flower; it is the *germ* formed by the pollen from the stamen.

W. The germ, papa, seems to be divided into two parts.

P. It is. The upper part of the germ is called the *plumula*, and the lower part is called the *radicle*. You shall hear of the functions of these parts in our next lesson, but we have only time for their names to-day.

L. What do you call the two great divisions? You said they were "lobes."

P. The proper name for each lobe is *cotyledon*.

W. There is another part which we have not noticed yet—the pretty skin outside the seed. So there are four parts in a seed—the *skin*, the two *cotyledons*, and the *germ*, which consists of a *plumula* and *radicle*.

P. But all seeds do not contain two cotyledons. There is only one cotyledon in the seeds of corn, the grasses, and of all other endogens. Seeds with two cotyledons are called *di-cotyledonous*; those with one cotyledon are *mono-cotyledonous*.

W. I will repeat that—

EXOGENS are *di-cotyledonous*, and

ENDOGENS are *mono-cotyledonous*.

THE POOR MAN'S GARDEN.

Ah yes, the poor man's garden!
It is great joy to me,
This little precious piece of ground
Before his door to see!

The rich man has his gardeners,—
His gardeners young and old;
He never takes a spade in hand,
Nor worketh in the mould.

It is not with the poor man so,—
Wealth, servants, he has none;
And all the work that's done for him
Must by himself be done.

All day upon some weary task
He toileth with good will;
And back he comes, at set of sun,
His garden-plot to till.

The rich man in his garden walks,
And 'neath his garden trees ;
Wrapped in a dream of other things,
He seems to take his ease.

One moment he beholds his flowers,
The next they are forgot :
He eateth of his rarest fruits
As though he ate them not.

It is not with the poor man so ;—
He knows each inch of ground,
And every single plant and flower
That grows within its bound.

.. He knows where grow his wall-flowers,
And when they will be out ;
His moss-rose, and convolvulus
That twines his pales about.

He knows his red sweet-williams ;
And the stocks that cost him dear,—
That well-set row of crimson stocks,
For he bought the seed last year.

And though unto the rich man
The cost of flowers is nought,
A sixpence to a poor man
Is toil, and care, and thought.

And here is his potato-bed,
All well-grown, strong, and green ;
How could a rich man's heart leap up
At anything so mean !

But he, the poor man, sees his crop,
And a thankful man is he,
For he thinks all through the winter
How rich his board will be !

And how his merry little ones
Beside the fire will stand,
Each with a large potato
In a round and rosy hand.

The rich man has his wall-fruits,
And his delicious vines ;
His fruit for every season ;
His melons and his pines.

The poor man has his gooseberries ;
His currants white and red ;

His apple and his nelson tree,
And a little strawberry-bed.

A happy man he thinks himself,
A man that's passing well,—
To have some fruit for the children,
And some besides to sell.

Around the rich man's trellised bower
Gay, costly creepers run ;
The poor man has his scarlet-beans
To screen him from the sun.

And there before the little bench,
O'ershadowed by the bower,
Grow southern-wood and lemon-thyme,
Sweet-pea and gilliflower ;

And pinks and clove-carnations,
Rich-scented, side by side ;
And at each end a holly-hock,
With an edge of London-pride.

And here comes the old grandinother,
When her day's work is done ;
And here they bring the sickly babe
To cheer it in the sun.

And here, on Sabbath-mornings,
The good man comes to get
His Sunday nosegay, moss-rose bud,
White pink, and mignonette.

And here on Sabbath evenings,
Until the stars are out,
With a little one in either hand,
He walketh all about.

For though his garden plot is small,
Him doth it satisfy ;
For there's no inch of all his ground
That does not fill his eye.

It is not with the rich man thus ;
For though his grounds are wide,
He looks beyond, and yet beyond,
With soul unsatisfied.

Yes ! in the poor man's garden grow
Far more than herbs and flowers ;—
Kind thoughts, contentment, peace of mind,
And joy for weary hours.

MARY HOWITT.

THE TUDORS.

ELIZABETH.

ELIZABETH was the daughter of Henry VIII., by his wife Anne Boleyn, and was twenty-five years old when Queen Mary died. She was not only younger than her sister but she was more beautiful, and of a better disposition. It is said that she was of a "modest gravity, excellent wit, royal soul, and happy memory." She was also "indefatigably given to the study of learning," for, as I said before, it was the custom of the ladies in the time of the Tudors to study much. Before Elizabeth was seventeen years old she understood well Latin, French, and Italian, and had some knowledge of Greek. She could also sing sweetly, and play on the lute. Her good old tutor, named *Roger Ascham*, has given us an account of the many learned books she read; and he tells us that after she ascended the throne, she continued her Greek studies.

The people knew how learned Elizabeth was, and thought that she would make a wise queen; but her learning would not give her wisdom, for learning and wisdom are different things. We may get learning from men, and from men's books, but we only get wisdom from God, and from His holy word.

During the reign of Mary Elizabeth's good qualities did not preserve her from danger.

On the contrary, her sister disliked her; she was very jealous of her, and even wished to put her to death. You heard that Mary threatened to do so after the rebellion of Sir Thomas Wyatt. At that time, although Elizabeth was sick in bed, Mary sent a party of 250 horse to bring her, whether dying or dead. These men arrived at Elizabeth's house in the night, forced their way into her chamber, and informed her that she must be ready to go with them by the morning at nine o'clock. She was then carried off in the queen's litter, and was conveyed to the Tower, where she expected every day to receive sentence of death. Mary, however, did not dare to kill her sister, although she much feared Elizabeth, because she was a favourite.

When, therefore, at Mary's death, Elizabeth was at last raised to the crown in safety, there was great joy amongst the people. They were glad, too, because they knew that Elizabeth was a Protestant. They looked back on the gloomy period of Mary's reign, and remembered those dreadful persecutions with horror. They were now more anxious than ever to shake off the Roman Catholic religion. They had been forced to become Protestants during the reign of Henry and Edward, but now they needed

no forcing. They had seen how the martyrs had suffered and died for their religion; and that those martyrdoms which were intended to put down the Truth, had established it in their hearts more firmly.

As soon, therefore, as Elizabeth came to the throne, she applied herself to the great business of the settlement of the national religion. Like the reformers before the reign of Mary, she at first proceeded with prudence. She still retained some of the Catholic ministers in her privy council, but added others who were Protestants. Amongst these were the famous *William Cecil*, afterwards Lord Burleigh, and *Nicholas Bacon*, the father of the great Lord Bacon. She was also helped by her tutor Roger Ascham, another of those wise men who rendered her reign so celebrated.

With such good assistance Elizabeth was able, by degrees, to establish the Protestant Church as it was in the time of Edward VI. She began by a proclamation that *part* of the church service should be read in English. The bishops who would not acknowledge her as head of the church were dismissed; nearly all the lower clergy, however, adopted the new mode of worship.

The "Book of Common Prayer" was restored with certain alterations; and a new translation of the Bible was undertaken by authority. This

translation was improved at different times, and in the reign of James I. it became the "established version."

The Pope did not allow all this to be done without trying to prevent it. He excommunicated Elizabeth, and issued a bull declaring her to be deposed, and cursing her subjects if they obeyed her. But the excommunications and curses of the Pope had now nearly lost their effect; the queen and the nation gladly excommunicated themselves.

Elizabeth took other measures in the early part of her reign to establish order. She made a treaty with France; she called in all the brass money and coin which had been debased, and issued new. She encouraged the people to till the ground, and to grow much more corn; she allowed them to sell their corn to foreign nations, if they pleased. She imitated her grandfather, Henry VII., and made laws to encourage commerce. Trade and navigation thus improved rapidly; the defences of the country were attended to; the navy was enlarged, and the shipping of the whole kingdom was so much increased that Elizabeth was called "*The restorer of naval glory and queen of the northern seas.*"

Like all others, however, Elizabeth sometimes lacked wisdom, and I shall have to speak of her bad as well as her good deeds in our next lesson.

THE ENGLISH TRAVELLER.

LONDON—THE MODERN BUILDINGS.

"MY DEAR CHILDREN,—

"I told you why we have a New Royal Exchange and New Houses of Parliament. Now hear something about them.

"The New Royal Exchange was begun on the 17th of January, 1842, and its foundation-stone was laid by HIS ROYAL HIGHNESS THE PRINCE ALBERT. The building was soon erected and completed; for it was opened by HER MAJESTY with great ceremony on the 18th of October, 1844."

"And yet," I said, "it seemed to me to be a very large building, and a very handsome one."

"Indeed it is both. It is 309 feet long, and the tower at the end is about 170 feet high. If you will go with me to-morrow, we will stop there on our way to the Exhibition. On ascending the broad flight of steps in the front of the building, you will find yourself inside an open quadrangle. In the quadrangle is a statue of HER MAJESTY; there are also statues of Queen Elizabeth, Sir Thomas Gresham, and Sir Hugh Myddelton. Around the quadrangle are piazzas, or arcades, under the shelter of which the merchants meet, and transact much business; it is, however, a great complaint that the piazzas are too open, and afford scarcely any protection from the weather."

"But I thought I saw shops all round the building?"

"Yes, the quadrangle is surrounded by the piazza, and the piazza is surrounded by shops and offices. The largest offices there, and the most important, are those of *Lloyd's*."

"What is meant by *Lloyd's*?" I asked.

"*Lloyd's* properly means "*Lloyd's Coffee House*"; but it also means the important society of *underwriters* who meet there."

"And what are *underwriters*?"

"They are the parties who insure the shipping of England; for just as houses are liable to be burned, and their contents destroyed, so on the water the ships and their contents are liable to be wrecked. Therefore, when a merchant sends his goods across the ocean, he generally insures the vessel and its cargo."

"The society of "*underwriters*" at *Lloyd's* have done very great service to the men of commerce. They have agents in all the principal ports in the world, and they forward to the office most important intelligence of all the shipping and commerce. This intelligence the society publishes every day. Thus the merchants are informed when all ships of England depart and arrive; they also hear of their departure and arrival in all other countries;

and they get rapid intelligence of all the accidents and wrecks that occur.

"Everything and everybody belonging to the society are arranged in the most perfect order; so that all the reports from foreign commissioners and consuls, and all the newspapers from every country, may be consulted easily and quickly."

"Then," I said, "the Royal Exchange is a very suitable place for "Lloyd's"; it must be very convenient for the merchants who meet there. Tomorrow I will notice the three parts of the Exchange,—the quadrangle, the piazzas, and the offices."

"In the neighbourhood of the Royal Exchange and the Bank are three other places worthy of note. One is the Stock Exchange, where an immense amount of business is done in buying and selling railway shares, shares in mines, public companies, Government securities, &c. This establishment is a particularly lively place, often very noisy indeed. It is situated at the end of a narrow passage, called *Capel Court*.

"In Lothbury, which is also near the Bank and the Exchange, is the ELECTRIC TELEGRAPH OFFICE. Here most important business is done in a much more quiet way than in Capel Court. Messages are sent to and from the office and all parts of the kingdom, yet there is little noise, except that of the moving of the wires, and the ringing of a bell.

Wires are conveyed underground from this office to every railway terminus in London, and from each terminus, along the lines, to the various stations. But I need not tell you what a wonderful thing the Electric Telegraph is.

"In Threadneedle Street, which is near the Bank, is a famous hall, which was built for merchants to assemble in, and is called the HALL OF COMMERCE. It is a most beautiful modern building, but hitherto it has not answered the purpose for which it was made.

"Of all the modern buildings in London, however, the most magnificent is that of THE NEW HOUSES OF PARLIAMENT. At least, it ought to be the best, for it has cost the nation a sum of money too large to think of; whether it has yet cost full two millions, I cannot say, but it is not unlikely that it will do so before it is finished.

"The architect is Mr. Charles Barry; he has united the building with that of Westminster Hall. The first stone was laid in 1840, and the building is not yet finished, so that it has now been nearly twelve years in erection. It is, however, nearly all completed, except the grand tower. The members of the Houses of Parliament first sat in it in 1850, and it was publicly opened by Her Majesty in the year 1852, on the 5th of February.

"For me to attempt any description of this vast place would be out of the question. I may just say that it covers nearly eight acres of ground; and that

the splendid front which faces the river is 900 feet long. This frontage is divided into five great compartments, which are ornamented with most beautiful tracery, and with rows of statues and shields. On the shields are the *arms* of the kings of England since the Norman Conquest. There are nearly 500 statues in and about the building. The three great towers are the Victoria Tower, the central tower, and the clock tower,

"The Victoria Tower when complete will be a most stupendous work, but it is said that it will be too high in proportion to the rest of the building. Indeed, much fault has been found with the whole edifice. It is said that it is overlaid with a profusion of minute ornaments,—that they spoil its simplicity,—that they appear paltry,—that they are good for nothing, except to catch the soot and smoke, and to form places for swallows' nests; and a great many more faults of all kinds are found with it, some of which are true. There is, perhaps, more reason to complain of the large sums of money which have been wasted upon it. It is, however, said to be the *largest* Gothic edifice in the world.

"Are there any more modern buildings in London?" I asked.

"Yes. There are many which it would take too long to describe to you. THE GENERAL POST OFFICE is a fine building. Of the various mar-

kets and prisons, some are nearly new.

"Ali! which are the principal markets?" I said. "Where are the vegetables sold?"

"Those for vegetables are COVENT GARDEN and FARRINGDON Markets.

"The market for cattle is called SMITHFIELD. I told you that it is to be removed because of the nuisance caused by the cattle which pass through the public streets.

"The principal meat and poultry markets are NEWGATE and LEADENHALL.

"The principal Fish markets are BILLINGSGATE, in the City, and HUNTERFORD, which is nearer the West-end.

"The bread market is at the CORN EXCHANGE, in Mark Lane.

"There is also a new COAL EXCHANGE.

"Some of the *Places of Amusement* are also fine buildings; the Theatres DRERY LANE and COVENT GARDEN, the ITALIAN OPERA HOUSE, &c.

"At the West-end, the most magnificent buildings are the Club Houses and Royal Palaces; while in the City there are Assurance Offices, which are almost as grand.

"The prison of NEWGATE and the MODEL PRISON of Pentonville are also modern buildings."

"Thank you," I said; and I was going to make a list of the principal modern buildings, but I had not time; so please, dear children, to make one yourselves, and believe me

"Your affectionate friend,
"HENRY YOUNG."

ETYMOLOGY.

CHAPTER III.

ON THE DIFFERENT KINDS OF PRONOUNS.

P. Besides the personal and relative pronouns, there are others called ADJECTIVE PRONOUNS.

W. I suppose that is because they are something like adjectives.

P. Yes. *This* and *that* are one kind of adjective pronoun, you may easily see that they are pronouns. If I hold a book in my hand, and say, "Take *this*," what does the word "*this*" stand for?

W. For the book; so it is a pronoun. Or you might say, "Take *that*;" so *that* is a pronoun.

P. Now let us see why they are like *adjectives*. If I say, "Take *this* book," the word "*this*" describes the book; it shows that it is not the same as *that* book. The plural of *this* is *these*; of *that*, *those*.

You can at any time form the plural from the singular by trying to use the singular pronoun with a plural noun. Alter these sentences, "*This* books are pretty;" "*That* cows are coming."

The principal use of the words *this* and *that* is to point out anything that is required. The Latin word for to point out is *monstrare*; therefore *this*, *these*, *that*, and *those* are called DEMONSTRATIVE PRONOUNS.

W. That is one sort of adjective pronoun, *papa*. Now please to tell us another.

P. Here are some different pronouns. *One* pronoun sometimes stands instead of a *great many* nouns. Suppose that you saw an army of three hundred soldiers on horseback, and you were to look at them.

W. Yes.

P. Then, suppose you said, "I know *every* soldier." How many persons would the word *every* stand for?

W. It would represent three hundred.

P. And suppose you said, "I know *each* man and *each* horse," how much would the words *each* represent?

W. The first *each* would represent three hundred men, and the next, three hundred horses.

P. There are other pronouns like *each* and *every*; the words *either* and *neither* belong to the same class. But *either* and *neither* cannot be applied to so many persons. You cannot say, "Here are three hundred soldiers; I do not know *either* of them." *Either* and *neither* do not apply to more than two persons.

J. What are these adjective pronouns called?

P. They are called DISTRIBUTIVE PRONOUNS, a name which you can easily remember.

The word *each*, for instance, only represents one person, yet it may be *distributed* over a crowd of three hundred.

There are more kinds of adjective pronouns. We often make such sentences as these—

Who are you? *Whom* do you want? *Whose* son are you? *Which* is the way to town? *What* is the matter?

W. But, papa, we have had the words *who*, *whom*, *whose*, *which*, and *what*, before; they are *Relative* pronouns.

P. In these sentences they are not relatives, for two reasons. 1st, They have no antecedents; and, 2ndly, They are used in asking questions.

The Latin word for to ask a question is *rogare*; so these words, as they are used in these sentences, are called "INTERROGATIVE PRONOUNS."

L. Are there any more adjective pronouns?

P. Yes. There are some which cannot be called Demonstrative, or Distributive, or Interrogative. Here they are—

All, any, both, certain, few, many, one, none, other, another, several, such, whole.

Some of these are very much like adjectives. They are, however, very different in their nature, so that they are not easy to describe. They are, therefore, all thrown together, and are called INDEFINITE PRONOUNS. Indefinite, you know, means not well explained.

W. I suppose that there are no more adjective pronouns.

P. I think not. In some grammar books we find that

the pronouns *my*, *thy*, *his*, *your*, &c., are called POSSESSIVE PRONOUNS; but if you will look back to a lesson on personal pronouns, you will see that such words are said to be the *possessive case* of those pronouns. In most grammars the possessive of *I* is said to be *mine*; of *thou*, *thine*, and so on; but I think that both kinds of words, *mine* and *my*, *thine* and *thy*, are only the possessive of the other personal pronouns.

Ion. What is the difference between *mine* and *my*?

P. The only difference is, that *mine* may be used alone. If you possess anything you may say, "This is *mine*"; but you cannot say, "This is *my*." You require a noun to join it to.

L. And that is why *my* is more like an adjective—it is dependent, and must be joined to a noun. I will now sum up the account of those pronouns.

Besides the *personal* and *relative* pronouns, there are others called *adjective* pronouns, because they are generally used like adjectives.

1. *This*, *that*, *these*, and *those*, are used to point out; they are therefore called DEMONSTRATIVE PRONOUNS.

2. *Each*, *every*, *either*, and *neither*, are called DISTRIBUTIVE PRONOUNS.

3. *Who*, *whose*, *whom*, *which*, and *what*, are sometimes used in asking a question; they are then called INTERROGATIVE PRONOUNS.

4. The words *all*, *any*, *both*, *certain*, *few*, *many*, *one*, *none*, *other*, *another*, *several*, *such*, and *whole*, are called INDEFINITE PRONOUNS.

No. 21. PARSING EXERCISE.

This man is either a lawyer or a doctor. I think he is neither. Every man is of my opinion. Who calls? I do. Each boy is to come with me. These collars are not like those. That is a pretty frock. The frock which you have is prettier than any. I do not see many. Both are good ones, but these and the other are prettier than all you now have. Certain frocks of mine have been spoiled by the moth. I have several. I have seen Paris, which is the capital of France. Which is the capital? I who have been abroad and returned. Who has been abroad? Which places have you been to? Both are places which I have not seen.

THE BOY'S FIRST GRIEF.

Oh! call my brother back to me,
I cannot play alone;
The summer comes, with flower and bee—
Where is my brother gone?

The butterfly is glancing bright
Across the sunbeam's track;
I care not now to chase its flight—
Oh! call my brother back.

The flowers run wild—the flowers we sowed
Around our garden tree;
Our vine is drooping with its load—
Oh! call him back to me.

"He would not hear my voice, fair child!
He may not come to thee;
The face that once like spring-time smiled,
On earth no more thou'llt see!"

"A rose's brief bright life of joy,
Such unto him was given;
Go, thou must play alone, my boy—
Thy brother is in heaven!"

And has he left the birds and flowers,
And must I call in vain;
And through the long, long summer hours—
Will he not come again?

And by the brook, and in the glade,
Are all our wanderings o'er?
Oh! while my brother with me played,
Would I had loved him more!

MRS. HEMANS.

DAILY HYMN.

FARRANT.

Lord, I would own thy ten - der care, And all thy love to

Lord, I would own thy ten - der care, And all thy love to

me: The food I eat, the clothes I wear, Are all be - stow'd by thee.

me: The food I eat, the clothes I wear, Are all be - stow'd by thee.

'Tis thou preservest me from death
And dangers every hour:
I cannot draw another breath
Unless thou give me power.

My health, and friends, and parents dear,
To me by God are given;
I have not any blessing here,
But what is sent from heaven.

Such goodness, Lord, and constant care,
A child can ne'er repay;
But may it be my daily prayer
To love thee and obey!

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

18th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE MAN WHO IMPROVED WOOD-ENGRAVING.

Ion. I'll tell you what pleased me in the Great Exhibition, papa! They pleased me more than anything I saw. Can you guess?

P. No, not when you say *they* without explanation. "They" may mean all the things in the place.

Ion. Well, then, the *printing-machines* pleased me most. It was such good fun to see a piece of white paper put into the machine and come out "Illustrated London News" all covered with pictures. And in the other machines, where the great iron rollers (cylinders, you called them) were horizontal, like great garden-rollers, how they rolled over the type!

W. It seems wonderful to me how all the pictures are made every week for the "Illustrated London News."

Ion. Why, they are engraved on wood. It is very easy.

P. You should say, Ion, that it is easy to admire the wood-cuts, and learn from them; but if you had to make them, and knew how much trouble engravers have even now, and have had in the early times, you would not say that it is very easy. And how very beautiful some wood-engravings are!

Here is one of Mr. Longman's books in which they are as fine as those engraved on steel. The books that are printed for you young people are full of "cuts," but the old books which your mamma and I had to read twenty or thirty years ago were almost without pictures.

Suppose that to-day we talk of the two men who introduced the arts of printing and wood-engraving into England.

Ion. Yes, do, papa, please. I should like to know something about such things.

P. Then to begin with the wood-engraving. Wood-engraving is an ancient art. In a German convent an old wood-cut was found, which was a representation of St. Christopher, dated 1423. Wooden blocks were also used for stamping the figures on playing-cards at a very early date.

But the art of wood-engraving was in a very imperfect condition until the beginning of this century, and it was not until lately that wood-blocks were very generally used for books.

W. No. I have noticed that in the old-fashioned books the pictures are engraved on steel.

You have a large book, papa, with engravings which are called *mezzotints*.

I. And some of the books have pictures printed from stone; they are called *lithographs*.

P. The printing from stone is a much newer art than that from blocks. We also have *zinc* printing; and, besides the line engravings on steel and copper, and the mezzotints, and aquatints, there are several new inventions for printing; but the advantage of wood-engravings over all these is, that the blocks can be printed with the type.

W. Why is that, papa?

P. You can easily understand if you notice the printer's type. The letters form a raised surface for the ink-roller to roll upon; when this surface is blackened by the ink, it makes a black impression on the paper. It is just so with the lines of the wood-cut: every line that you see in the engraving is first drawn on the wood; the wood is then cut away on each side of it, so that its surface may be raised, and receive the printing-ink from the roller. The case is different in steel-engravings; the lines are *cut into* the plate, and the ink is rubbed into the hollow places, while the surface of the plate remains smooth and without ink. Thus, you can see, that if men tried to print a steel plate on the same page as the letterpress, they would have to *roll* the plate along with the type, instead of *rubbing* it smooth.

L. So that the printing-ink

would stick to the surface of the plate, instead of filling up the lines. Are the lines which are printed from stone cut into it or raised above it?

P. Neither. They are on the same level; they are merely drawn on the stone, and when the ink-roller is rolled over its surface, it inks only that part on which the lines are drawn.

W. That is curious. How does the roller know which part has lines drawn on it?

P. That is a question which I have not time to answer now. Printing from stone is a chemical rather a mechanical process. You might suppose that as the drawing on the stone has to be *rolled* over like the type, instead of being *rubbed*, both might be printed together. This, however, could not be. Even if the same roller and ink would do for both, there would still be a difficulty, as the stone has to be carefully wetted every time before it is rolled. So wood-engravings are (with the exception of stereotypes, and the new electro-types, called *glyphographs*) the only article that can be used to print with type. But I have been talking about printing in general, instead of wood-engraving. Now let us turn to the wood-engraver who so much improved that art. His name was Thomas Bewick.

THE LIFE OF THOMAS BEWICK.

If you had lived in Northumberland, in the little village of Cherryburn, in the year 1760, you might have seen a boy who seemed to know all the

animals in the place. Instead of throwing stones at the dogs in the street, he felt very friendly towards them. I dare say that when he saw a strange dog he would say to him, "Poor fellow!" and would pat him, or stroke him, or tell him to put up his paw.

Ion. Perhaps he would give him something to eat.

P. Perhaps so. That is a sure way of winning the heart of a dog. At all events he "made friends" with all the new dogs, and all the old dogs, and all the other animals round about him. The horses, cows, asses, sheep, and cats; the lambs, the geese, the ducks, and the other poultry; the pigeons, and even the sparrows, were acquaintances of his. He seemed never to pass one without noticing it. Besides making personal acquaintance with them, he was delighted to watch their *habits*, and to learn what they did with themselves all day. At last he thought he would *draw* his friends. When he was at home in the evening, and thought about the animals he had seen in the day, he used to put down their shapes upon paper, for, of course, as he was always looking at them, they made a great impression on his mind, and he could remember their shapes exactly.

Ion. Yes; he could picture them out with his mind's eye.

P. Or he could form "a conception" of them, as we say,—if you remember what conception means. It was pleasant enough to draw his friends from memory; but he found out one

day that it was much better to draw from the animals themselves. Ah, that was delightful work! When he had persuaded one of the village dogs to stand still, he drew him on a wall. And there he was, as perfect as life! His nose and ears were drawn correctly; even his paws were copied with great exactness. So from that time the boy always kept a piece of chalk in his pocket, and he soon covered the doors, walls, and gates of the houses with copies of his pets. It did not matter whether he drew a lamb, a cow, or a goose; it was sure to be done carefully, and to be a faithful likeness.

W. What was the name of this boy, papa?

P. He was called THOMAS BEWICK. His love of drawing led to his becoming an engraver. It chanced one day that Mr. Bielby, a copperplate engraver, from Newcastle, was passing through Cherryburn, and he was much struck at seeing the walls of every place thus ornamented. He was delighted, too, to see with what talent the animals were drawn; so he found out the name of the boy who drew them, went to his father, and persuaded him to let him become his apprentice as soon as he was old enough.

It happened, soon after young Bewick had gone to live with Mr. Bielby, that Dr. Hutton required a series of copperplates for a mathematical work. When Mr. Bielby received the order he persuaded the doctor that it would be better to have the diagrams cut in wood than

on copper, so that they might be printed with the letterpress. "For," he said, "if they are engraved on copper, they must be printed on separate leaves, and stitched into the book." Dr. Hutton followed the advice given, and many of the diagrams were then put into young Bewick's hands to be cut. The boy succeeded with his work beautifully. He astonished his master. He had cut the lines drawn, with such care that they were very fine indeed. Mr. Bielby had no idea that they could be cut with such accuracy and finish.

The art of wood-engraving had at this time fallen into the very lowest repute; but Bewick's master said to him, "I would advise you to take it up, and give your attention to it as your profession."

Bewick did as his master advised him. He soon made great improvements in the art; and when the time of his apprenticeship was completed he went to London. There he found a person who practised the trade, living in the neighbourhood of Hutton Garden. He seems, however, not to have learned much from his new master; for he soon left him, and returned to the country. He settled at Newcastle again, and was taken into partnership by his old friend Mr. Bielby.

Shortly after this settlement Bewick produced the engraving which brought him into notice. He drew, on a block of wood, an old hound, and, having cut it with the greatest possible care, he sent it to the Society

of Arts. This was in the year 1775. The Society had that year offered a prize for the best wood-engraving, and Bewick thus gained it. The block had been cut for an edition of Gay's Fables, which book was published in 1779. The work immediately gained general attention, for the wood-cuts were strikingly superior to anything that had been seen in England. Bewick had been helped in producing them by his younger brother John, who had become his apprentice.

It would take a long time to describe to you the pains Thomas Bewick took to improve the art of wood-engraving. He introduced several new modes of operation. One was that of rendering one part of the surface of the block lower than the other, so that the lines drawn on it to represent distant objects might be much lighter when printed. In this way he contrived to produce several shades from one block. Bewick, by such attention, soon rose to the head of his profession. His fame, however, was owing not only to his talents, but to his industry. He would never have succeeded as a wood-engraver if he had not been industrious; but he was so, truly. He made labour his enjoyment. He always rose very early, and from then until bedtime he was generally found at work, whistling merrily. He had very few friends, for he had little time for talk, or for social pleasures. He despised all indulgences, and delighted in strong, manly exercises. Like the great men whom I have

told you of already, he liked anything that was *hard* to do. All the invigorating sports of the country he took a pleasure in.

Bewick was famous not only for his exertions and perseverance, but for his temperance. He ate and drank with moderation, and so hardy was his frame that he even slept, in the depth of winter, with the windows of his chamber open. It is said that sometimes, on awaking, he found the snow on his bed-clothes. With such habits it will not be wondered at that Bewick did much in his lifetime. The animals which had been his favourites when a boy were his constant study. With steady perseverance he continued to sketch all the striking specimens that came under his notice. He visited every menagerie that came to Newcastle, and drew the animals there from life; and in the year 1790 he published "The History of Quadrupeds," which book rendered him more celebrated than ever. The pictures in this book were all copied from his own drawings, and engraved by himself and his brother. The publication was also adorned with vignettes, some of which had uncommon merit. The engravings were so true to nature that

they were even better than those made for Gay's Fables. They were such as the world had never seen before.

Bewick did not confine himself to one art; he occasionally engraved on copper as well as on wood. Besides studying natural history, he followed other branches of knowledge. In all the works of Bewick it was his aim to teach sound knowledge and morality. This was seen in his very last work; for to the last hour of his existence his art occupied his thoughts. In the 76th year of his age he was engaged on a series of cuts for the use of poor people. He thought that he would prepare something better to hang up for ornaments in their cottages than the tasteless and bad prints usually found there. A proof of a block of an old horse, which headed "*An Address against Cruelty to Animals,*" was brought to him only two or three days before his death. This happened in the year 1828.

Thomas Bewick was a good and useful man. When you see the beautiful engravings in your picture-books again, you may think of him. Remember that the good he did was chiefly owing to his industry.

SUM up at night what thou hast done by day,
And in the morning what thou hast to do;
Dress and undress thy soul, mark the decay
And growth of it; if with thy watch, that too
Be down, then wind both up; since we shall be
More surely judged, make thy accounts agree.

HERBERT.

CHAPTER II.

THE PARTS OF A PLANT—THE SEED (*Continued*).

P. We have seen the parts of your lupin-seed, Willie; now let us consider their functions. Have you another lupin-seed?

W. No; I put all I had in my garden last Friday. Shall I go and get one out of the ground?

P. You need not do that; let us go into the garden to the seed itself.

* * * *

W. This is one of the places where I sowed some lupins. Here is a great blue lupin where you see the stick.

P. Then let us talk of the great blue lupin, and learn how it grows. I suppose, Willie, that you made a hole in the ground, and put in the lupin, and covered it over.

W. Yes; that is what I always do.

P. And, if the seed could only understand, it might tell you that that is a proper thing to do. By covering it with earth you placed it in dampness and in darkness. The seed requires four things: dampness or moisture, darkness, air, and light; when it has these it begins to send forth its germ, or *germinate*, as we say.

Ion. And do those four qualities cause it to come to life and grow? I should like to know how they act.

P. I will tell you. The moisture does several things:

(1.) It softens the skin of the

seed, so that when the cotyledons swell they easily burst it.

(2.) The cotyledons contain nourishment for the little germ, and the water softens this nutritious matter: then the germ can more easily absorb it.

(3.) It also dissolves the nutritious juices of the earth, which the young plant will soon require.

W. I think I'll go and fetch my watering-pot directly, and—

P. That is not necessary. The water which you gave the lupin this morning will last for some time—too much is as bad for it as too little. Now I will tell you what the air does.

You see, Willie, that there are pores in the earth which you have placed over this lupin; the air will pass through these pores until it reaches the cotyledons. The *nutritious part* of the cotyledons contains carbon, the oxygen of the air will combine with it, and will thus change it into a sticky substance, consisting principally of gum and sugar. You have heard before that oxygen is necessary to change starch into sugar.

Ion. The thickened sap which nourishes the tree, the *cambium*, consists of gum and sugar.

P. Thus the air is useful to the seed as well as to the sap. It prepares the *sap* in the leaves for nourishing the plant; and it prepares the *cotyledons* for nourishing the young germ. Now you see, Willie, why your

Lupin would not grow, if you put it too far into the earth; the air could not reach it. You may have noticed that when a piece of ground has lately been dug up, it is quickly covered with weeds; these arise from seeds which have been covered by a depth of earth; as soon as they are thus turned up to the air they begin to germinate and grow.

Ion. That is because the oxygen of the air changes the starch of their cotyledons into sugar.

P. That is partly the reason. *Heat* is a third agent which causes a seed to germinate; it assists the water and the air in acting upon it, and it causes the cotyledons to absorb water and gases.

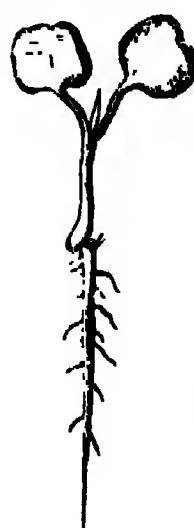
W. And what is the use of darkness?

P. Perhaps there is no positive use in the darkness, but few seeds germinate properly in the light; too much carbon accumulates, and the cotyledons become hard in consequence.

W. Well, I think my blue lupin seed has begun to germinate. Please tell me what it is going to do next?

P. It will next sprout. The lower part of the germ, the radicle, as we called it (see page 261), will shoot downwards, and begin to form rootlets. The upper part, the plumule, will then shoot upwards. Being strengthened by the nourishment from the cotyledons, it will be able to rise above the ground, carrying the cotyledons along with it. You see

in this picture the appearance it then has.



W. Yes. That is just how my lupins grew last year. They had two thick green leaves, but I did not know they were called *cotyledons*. Why were they green? If you look at them when they are part of the seed they are white.

P. They become green by exposure to the light. And as your lupins grew did you not notice the little leaves between the cotyledons?

W. I did. And they were the beginning of the plant itself. As they grew up and had a stalk and larger leaves, the cotyledons turned yellow and shrivelled up.

P. Yes; there was no nourishment left in them. When the young plant first showed itself between them, it was not strong enough to feed on the gases of the air; it fed on the nourishing sugar in the cotyledons, until it was nearly all consumed. It was then strong enough to absorb nourishment from the root and the air.

L. Then the cotyledons may be called the plant's mother, because they nourish it when it is a baby. The young germ is just like a little baby which is obliged to feed from its mother's breast; then it gets strong, and is able to eat stronger food.

Ion. I do not think that all

plants grow like the lupins. Do they, papa?

P. All *exogens* do; but they have not all such thick cotyledons,—in some the cotyledons are only very thin leaves. When the acorn grows the cotyledons do not rise above the ground.

L. But when the cotyledons are only very thin leaves, how do the young plants get nourishment?

P. In such cases there is a store of nourishment placed in the seed by itself; it is called *albumen*. You remember that the endogens have only one cotyledon.

W. Yes; they are monocotyledonous.

P. In the endogens the store of albumen is very great; it is many times larger than the germ. You have an instance of this in the well-known endogen the *corn-plant*. We can live on its seeds, because they contain so much albumen stored up for the young germ. We call the albumen of the seed *gluten*.

Ion. And you told us in "Fireside Facts" that the albumen in the cotyledons of peas and beans is called "legumen."

P. The *duration* of seeds is another point worth noticing. They lie in a dormant state until aroused by heat, moisture, and air. They sleep without dying until placed in such circumstances that they can grow. Thus grains of wheat have been taken out of the Egyptian mummies, where they must have remained some thousands of years, yet they have afterwards grown. Some raspberry

seeds were taken out of the stomach of a soldier who was buried in the time of the Roman Emperor Hadrian, and they were still alive, and grew.

L. You also told us, papa, how the seeds are spread over the earth; the seeds of dandelions are blown from one place to another by the wind.

P. Yes, the *propagation* of seeds is another pleasing subject. You have noticed, no doubt, that they are very light, and have a feathery substance or wing attached to them, so that the wind easily scatters them. The rivers, and even the seas, disperse the seeds; all kinds of animals, particularly birds, are useful for this purpose.

W. There is another way of procuring new plants besides sowing seeds. My carnations—

P. True; I remember showing you how to cut off the stalks of your carnations near the buds, and plant them; we were then planting "layers." We also cut off some young branches of the currant-trees and formed "slips"; such a plan is called propagating by *buds*.

Ion. So there are two ways of propagating plants—by *seeds*, and by *buds*.

P. Before we write our lesson on the seed, let us once more point out the difference between the two great divisions of plants, the *exogens* and *endogens*. You have heard of the difference in their stalk, the difference in their leaves, the difference in their flowers, and the difference in their seeds—now repeat the particulars.

TUESDAY.

PLEASANT PAGES.

BOTANY.

An EXOGEN has
A Stem growing by adding parts outside those previously formed.

Leaves, with veins in different directions, like a network.

Flowers, with two or five petals in the corolla, or some "multiple" of these numbers.

Seeds, with two cotyledons.

An ENDOGEN has
A Stem, which grows by adding parts inside those previously formed.

Leaves, with long, straight, and parallel veins.

Flowers, with three petals in the corolla, or some "multiple" of that number.

Seeds, with one cotyledon.

Memory Lesson 6. THE PARTS OF A PLANT—THE SEED.

1. *The seed is the little organ which is found in the seed-vessel, and ripens after the flower has decayed: it contains the germ, which afterwards forms a new plant.*

2. *The parts of the seed are the stem, the cotyledons, and the germ. The seeds of endogens have only one cotyledon, but contain a store of nourishment for the plant, which is called albumen.*

3. *The parts of the germ are the upper part, called the plumula, which grows upward towards the light, and forms the young plant; and the lower part, called the radicle, which grows downwards, and forms the root. The cotyledons are thick, fleshy lobes, containing starch, which is changed into sugar, and furnishes nourishment for the young germ. Seeds do not easily decay, because they contain so much carbon. In order to "germinate" they should be placed in the dark, where they can be influenced by heat, moisture, and oxygen; these conditions can be obtained when they are placed in the light porous earth.*

SPRING.

HARK! the little birds are singing—
Winter's gone and summer's near;
See the tender grass is springing,
And the flowers will soon appear.

Who made the winter and the spring?
Who painted all the flowers?
Who taught the little birds to sing,
And made these hearts of ours?

It is God—how good He is!
He does every blessing give:
All this happy world is His—
Let us love Him while we live.

MRS. FOLLEN.

THE TUDORS.

ELIZABETH.

P. I SAID last week that Elizabeth did evil as well as good. The followers of the Pope had persecuted the Protestants in Mary's reign, and in many parts of Europe Protestants were still burned and hanged, and treated most cruelly. It was in the reign of Elizabeth, in the year 1592, that the massacre of St. Bartholomew was committed. On St. Bartholomew's day about twenty thousand of the Protestants in the city of Paris were slaughtered.

The people of Spain were even more fierce against the Reformed religion than the French. Philip, the Spanish king, like most of the other monarchs, hated the new heresy, as it was called. He thought that as it allowed the people to think for themselves, they would become less obedient to their kings. He made war on the people of the Netherlands, and fought with them nearly twenty years because they were Protestants. It was, as I told you, the great question of those days which should conquer, truth or error; and Elizabeth made mistakes as well as those who were opposed to her;—she sought it right to destroy her enemies.

Elizabeth's anxiety for the Protestant religion was partly the cause of the great act of wickedness which has so damaged her character,—I mean, the murder of her cousin Mary, the Queen of Scots.

The Catholic kings of Europe, the Pope, and the popish priests were allied against the English Queen. They wished to dethrone her, or even to destroy her, so that she might not establish the Protestant religion in this country. They would have destroyed her if they could, and would have placed on the throne her cousin Mary, who was a Papist. Elizabeth knew this; she knew that while Mary lived she herself was likely to be killed; she knew that the work of the Reformation would then lose her help; and this, perhaps, is all that can be said to excuse Elizabeth for murdering her cousin. You may remember, too, that those times were much more barbarous than the present, and that when twenty thousand people were massacred at once, one life was not so likely to be considered.

But you still hear the history of Mary Queen of Scots. Mary, like Elizabeth, was a Tudor. She was great-granddaughter to Henry VII. When very young she was married to the Dauphin of France; and, like her husband and the greater part of his nation, she was a Papist. Before Mary was nineteen years old her husband died; and as she was then not happy in France, she came back to Scotland, to be queen over her own people. It is said that on her way from France to Scotland she demanded a safe pas-

sage through England; but this Elizabeth refused, and thus an ill feeling was created between them. Elizabeth had, I dare say, good reason for refusing. She knew that Mary was one of the party formed by the Catholic kings to suppress Protestantism all over Europe. She knew, too, as I said, that this party wished Mary to become Queen of England; and again, she knew that Mary had some ground for her pretensions; for Henry VIII. had declared that neither Elizabeth nor her elder sister Mary had any right to be Queen of England; and in that case Mary would be the next heir.

On Mary's arrival in Scotland it was found that her character and that of her people were very different. The Scots were an earnest and thinking people; and were anxious to embrace the Protestant religion. A good man named John Knox had arrived from Geneva. He preached with such zeal that the Reformation made rapid progress. Mary, on the other hand, was a Catholic. She was of a gay and trifling disposition; and she ridiculed the strictness of the Scottish clergy. She married a second time, and chose for her husband a rather foolish young man named Henry *Stuart*, commonly called Lord Darnley. Mary again shocked her people by her bad treatment of Lord Darnley, whom she could not like. She showed more love for an Italian named Rizzio, whom the jealous Darnley killed. She then took into favour the Earl of Bothwell,

who murdered Darnley by causing the house in which he slept to be blown up with gunpowder. Two months after Lord Darnley's death Mary married Bothwell, and most of the Scots therefore thought that Mary had been wicked enough to take part in her husband's murder.

Thus Mary became hateful to her thoughtful and religious subjects. The Protestant nobles of Scotland formed a league against her, and imprisoned her in Lochleven Castle. Here they made her sign a paper giving up the kingdom to her son James, who was then an infant. They then crowned the little *James Stuart* as King JAMES THE SIXTH, and Mary's relation, the Earl of Murray, was appointed Regent.

While imprisoned in Lochleven Castle Mary managed to escape. She raised a body of troops and sought for her lost crown. The Regent, however, deserted her, and she fled to England to beg for the pity and protection of Elizabeth.

But Mary had made a mistake in expecting Elizabeth's help. I have told you two reasons why the Queen disliked her cousin; and now that her conduct in Scotland had been so bad, Elizabeth was not at all inclined to take her part. Instead, therefore, of receiving Mary at court, she caused her to be confined in a castle. During the long term of her imprisonment she was an object of constant jealousy to Elizabeth. It was proposed that Mary should be married to the Duke of Norfolk; but Elizabeth dreaded this

union, because it would increase her cousin's power; she therefore prevented it by sending Norfolk to the Tower.

The following year the Earls of Northumberland and Westmoreland rebelled in favour of Mary. They wished not only to set her free, but to restore the Popish religion; but they failed. The Queen of Scots was then removed to another castle for security.

Two years afterwards, in the year 1581, the Duke of Norfolk tried once more to marry Mary. The Bishop of Ross, a Romish clergyman, and other enemies of the Reformation, determined that Norfolk should depose Elizabeth, and make Mary Queen of England. This plot was however discovered, and the duke was executed.

Other conspiracies were continually being formed by the Roman Catholics for assassinating the Queen. The Spanish ambassador was ordered to quit the kingdom for being concerned in a plot to kill both Elizabeth and her Secretary, Burleigh. In 1584 Francis Throgmorton conspired to set Mary at liberty; and Mendoza, another Spanish ambassador, was ordered to leave England for being an accomplice. In the same year Sir John Somerville, and in the following year Dr. Parry, both Catholics, formed designs to assassinate Her Majesty.

In the year 1586 another deep conspiracy was formed by a Catholic gentleman named Babington, and others; and this was the cause of Mary's

ruin. It was resolved to assassinate Elizabeth, to raise an insurrection, and to bring about a foreign invasion. It was proved that Mary was aware of these plans, and that the brewer, who supplied the family with ale, conveyed letters to her through a chink in the wall of her apartments. It is said that Mary thus learned that Elizabeth was to be put to death by six Catholic gentlemen. It is said, too, that Mary *highly approved* of the design, saying that Elizabeth's death was necessary; and that the gentlemen should have all the rewards she could confer. When, therefore, these facts were made certain, Mary was accused of high treason. Thirty-six Lords were appointed as commissioners to try her. They arrived at the castle of Fotheringay, in Northamptonshire, where Mary was imprisoned; and although she refused to admit their authority to try her, she was at length induced to appear before them. The Queen was treated with great severity by her judges, who would not allow her an advocate to assist in her defence, and they at length sentenced her to execution.

It is said that the nation much wished for Mary's death; that both houses of Parliament petitioned that the sentence might be carried out immediately; and that the citizens appeared intoxicated with joy, causing the bells to be rung for twenty-four hours, and bonfires to blaze in the streets. Whatever were Elizabeth's wishes, it appears that she

behaved with great indecision and craftiness. She pretended at one time that she did not wish for her cousin to die, and yet, when Mary's son, King James of Scotland, sent an ambassador to beg that the execution might be delayed for a week, she answered, "No, not for an hour!" She signed the warrant for Mary's execution, pretending that she only intended to keep it beside her, in case any attempt should be made to set her at liberty. The Commissioners, however, obtained possession of the warrant, and set off immediately to put it into execution. On the arrival of the Commissioners at Fotheringay they told Mary to prepare for death by eight o'clock the next morning. By that time Mary was ready. Being dressed in a rich habit of silk and velvet, which she had kept for the occasion, she walked steadily to the place of execution, having a long veil of linen on her head, and an ivory crucifix in her hand. She then pardoned her two executioners, declared that she died believing in the Catholic faith, and laid down her head, which was immediately severed from her body. Two hundred gentlemen were present at her

death, and, although they believed in her guilt, many were filled with pity and distress at her fate.

When the news of Mary's death was brought to Elizabeth, she expressed very great sorrow. To excuse herself, she treated her Secretary, Davidson, with great severity; imprisoned him for a long time; and fined him ten thousand pounds, thus reducing him to beggary. King James of Scotland was filled with the greatest anger at his mother's death, but Elizabeth wrote to him, declaring herself to be innocent, and he was in time pacified.

There is no doubt, however, that Elizabeth wished for Mary's death; and little can be said to justify her for allowing it. Her confinement for eighteen long years was also unfair and cruel. We can only say on Elizabeth's behalf, that as long as Mary lived she was herself in fear of being assassinated; that the Papists knew Mary would succeed to the crown on Elizabeth's death; and they were anxious that she should die. Elizabeth constantly felt that they would get rid of her if they could, so that Mary might be queen, and might help to restore their religion in England.

TO-DAY.

DON'T tell me of to-morrow;
There's much to do to-day,
That can never be accomplished
If we throw the hours away;
Every moment has its duty—
Who the future can foretell?
Then why leave for to-morrow
What to-day can do as well?

NORTH STAR, U. S.

ETYMOLOGY.

CHAPTER III.

THE DIFFERENT KINDS OF ADVERBS.

P. What is an Adverb, Ion?

Ion. An Adverb is a word added to a verb, to tell us something about the action. Examples: "I write *carefully*." "I speak *slowly*."

"*P.* What do the words "*carefully*" and "*slowly*" show?"

W. They show *how* you do the action; that is, they show the manner in which it is done.

P. Give me some more adverbs which show the manner of the action.

L. "I walk *gently*." "The bird flies *swifly*." "Do not read so *quickly*."

P. The proper name for such adverbs is ADVERBS OF MANNER.

Here are some other adverbs: "Come to me *directly*." "I will come *presently*." "Have you met him *lately*?" "I shall see him *soon*."

W. All these adverbs show *when* the action is performed. I call them ADVERBS OF TIME.

P. That is their proper name. Here are some adverbs which are neither adverbs of time nor adverbs of manner: "He will meet you *there*." "That dog follows me *everywhere*." "Come *here*." "I will not go *anywhere*."

Ion. These show the places *where* the action is performed.

P. So they may be called ADVERBS OF PLACE. Take notice of the adverbs in these examples: "You should think *much*." "You may eat *little*, but

do not sleep *at all*." "I eat *abundantly*, but I do not think *enough*."

L. These adverbs show *how much* the action is done. They show the quantity of the action.

P. True; so they are called ADVERBS OF QUANTITY. Here are some others: "I laughed *twice*." "I cried *once*." "He complained *frequently*." "John spoke *secondly*." "Mary came in *fourthly*."

W. Such adverbs are like the adverbs of quantity, because they tell you the number of times the action is performed. They are ADVERBS OF NUMBER.

P. Here is another kind of adverb." "I will *not* sing." "Can you sing?" — "Yes." "Will you?" — "No." "I mean it, *really*." "I can sing, *indeed*."

You notice that the adverbs, yes, really, indeed, and others, merely *affirm* that the thing can be done. Thus they are called ADVERBS OF AFFIRMATION. 'No' and 'not' *deny* that the thing can be done; so they are called ADVERBS OF NEGATION.

Ion. That will make six kinds of adverbs.

P. Yes; I will make the rule for you so as to supply you with examples:—

RULE.—Adverbs may be added to verbs to show how, when, where, how much, and how often the action is performed. They may also be used to affirm or deny.

Thus we have—

1. ADVERBS OF MANNER. Examples :—*Quickly, wisely, nicely, very, highly, nearly, almost, how, quite, well, ill.*

2. ADVERBS OF TIME. Examples :—*Now, then, when, never, soon, to-day, to-morrow, yesterday, daily, lately, immediately, often, at once, directly, hourly, already, early, late.*

3. ADVERBS OF PLACE. Examples :—*Herr, there, everywhere, anywhere, elsewhere, somewhere, hence, away, off, hither, downwards, upwards, around, upon, ahead, beyond, out, in, without, within.*

4. ADVERBS OF QUANTITY. Examples :—*Much, little, sufficiently, sparingly, abundantly.*

5. ADVERBS OF NUMBER. Examples :—*Secondly, thirdly, fourthly, frequently, seldom, once.*

You noticed once that adverbs are like adjectives ; one class of words being added to nouns, and the other to verbs.

You may observe, too, that some adverbs may be compared like adjectives. For instance, *soon, sooner, soonest* ; or, *quickly, more quickly, most quickly*.

You may also notice that many adverbs are formed from adjectives simply by adding *ly*. Thus, “A slow boy walks slowly.” “A bad girl acts badly.” “A nice child sings nicely.”

W. I have seen some very

long adverbs joined to verbs, *papa*. For instance : “I will come *by-and-by*.” “People travel *now-a-days*.” “I do not dance *at all*.” “I cannot dance *in the least*.”

P. Some of these phrases are not very good ones. As they are not single words we do not call them “adverbs.” They may be called “Adverbial phrases.”

Ion. Then I will write all these particulars in another rule :—

RULE.—Adverbs may be compared like adjectives ; thus, *quickly, more quickly, most quickly*. They may also be derived from adjectives ; thus, from *bad* we get *badly*. Many phrases of two or three words are sometimes added to verbs ; such as, *now-a-days, by-and-by*. They may be called “Adverbial phrases.”

P. In all future parsing exercises you are to make use of all the information you have gained. When you meet with a **NOUN** say its gender, number, person, and case. Say the same of the **PRONOUNS**, and whether they are relative, demonstrative, or possessive. Also mention the degree of comparison of each **ADJECTIVE** ; and say what kind of **ADVERB** when you meet with one.

No. 22. PARSING EXERCISE.

The girl who draws so quickly lent me a drawing. This goose [shall be cooked] for dinner. Cook it quickly, and carefully. Who are you ? Now I see the moon ; she peeped out, just now, from the black cloud. There goes the train ! we are too late. Yes, we are. No, we are not. It is only a luggage train. Hurrah ! Make haste. Run quickly.

A SONG FOR MARCH.

The dormouse hath waked from his winter sleep,
 And the squirrel is springing from bough to bough,
 And the mole is at work in his cavern deep,
 Unhurt by the share of the delving plough ;
 The song of the bird is now and then heard,
 As the sunshine falls on the leafless woods,
 And the boughs, though bare, give here and there
 A glorious promise of crimson buds.

One by one in the meadows green
 The silver daisies their eyes unclose,
 From its icy bonds set free, between
 The sprouting alders the streamlet flows,
 Singing a song the whole day long,
 To spread the glad tidings on every hand,
 That winter is gone, the spring cometh on,
 And "the voice of the turtle is heard in the land."

Every day, and every hour,
 New shapes of beauty the eye beholds,
 As the sun shines forth with greater power,
 The green blade springs, and the bud unfolds ;
 Down, far down, 'neath the surface brown,
 What a busy stir of life is there ;
 Seed and root expand and shoot,
 Making their way to the light and air.

"No more slumber, and no more rest,"
 There's a work to do and a race to run ;
 Sluggards may sleep, if they like it best,
 We must away to meet the sun ;
 To deck the hills, to shade the rills,
 And to cover the vales with waving grain ;
 With leaves to shield, ripe fruits to yield,
 To please the sense and the life sustain.

"No more slumber, and no more rest !
 (Such is the song that all nature sings,)
 Till the last autumn sun sinks down in the west,
 And the birds sit mute with folded wings ;
 For even forth to the icy north
 A voice hath gone, which saith, 'Arise,
 Deck earth anew with every hue
 Which she wore in her Eastern Paradise !'"

Such is the song that all nature sings ;
 Shall man be idle, shall man be mute,
 While flying, and swimming, and creeping things,
 The coldest clod, and the dullest brute,
 Now straight begin to delve and spin,
 To work the work which they have to do,
 And obey the call which biddest all
 The pre-appointed path pursue ? II. G. ADAMS.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

19th Week.

MONDAY. Moral Biography.

INDUSTRY.

THE FIRST ENGLISH PRINTER.

P. I INTENDED last week to give you an account of the first English printer, as well as the improver of wood-engraving—but the history of Bewick cost us a long time.

Perhaps there has been no invention since the world was made which has been so serviceable as printing. You know how greatly it has helped to spread knowledge and truth over the face of the earth.

The art has improved wonderfully since the beginning. If the man who first printed in England could have seen the machines at work in the Exhibition, sending forth thousands after thousands of impressions per day, he would have said, "What progress you have made!" But he might, perhaps, have added to himself, "I began all this work."

The name of the first English printer was WILLIAM CAXTON. Let us begin his history.

THE LIFE OF WILLIAM CAXTON.

About the time when King Henry IV. of England died William Caxton was born. No one knew who his father was, except that he lived in the "Weald" of Kent. It is sup-

posed that he must have been a gentleman, because he gave his son an education; for in those days even the sons of noblemen and men of great wealth were often very ignorant. Caxton knew the value of his learning; for he says, "*I am bounden to pray for my father's and mother's souls, that in my youth sent me to school, by which, by the sufferance of God, I get my living, I hope, truly.*" It is supposed that he was sent to London to receive the best instruction, for he calls that city his "mother, of whom he had received his nurture and living."

When Caxton was a boy he was apprenticed to Mr. ROBERT LARGE, an eminent mercer, or merchant, who was once Lord Mayor. His master died in 1441, and showed his esteem for Caxton by leaving him twenty *merks*. Caxton then left England to live in the Netherlands. It is supposed that he there earned a living as agent of "The Mercers' Company," which was then one of the wealthiest companies of England. It seems very likely that Caxton was a man of high character, for in 1444 he was one of the ambassadors for

King Henry IV. when he formed a treaty with the Duke of Burgundy.

I said that in the time of Caxton even noblemen and wealthy men were ignorant. You remember, I dare say, the history of John Huss, and the darkness which I told you then reigned in men's minds. The year when Caxton went to the Netherlands was about the time when the doctrines of Huss and others were enlightening Europe. The light of knowledge as well as religious truth was then dawning. The Pope, Nicholas V., and the nobles of Florence and other lands, were cultivating a taste for learning, and, as it is said, "the concentrated gloom of centuries appeared to be rolling off."

It was just at this important time, in the early part of the 15th century, that the art of printing was discovered. Just when the love of knowledge was beginning to require sufficient means for spreading it, then did Guttenburg and Faust, at Mayence, surprise the world with their wonderful letters for printing.* The fame of their invention had spread throughout Europe, and amongst those who heard of it was William Caxton. As soon as he felt sure that it was a real, substantial, and most useful art, he set himself to acquire the skill for practising it. For many years Caxton devoted his attention to printing, residing in Brabant, Flanders, Holland,

and Zealand. He spent about thirty years of the prime of his life, and a considerable sum of money, in overcoming the difficulties of the profession. He then made two or three experiments as a printer, and feeling sure of success he came back to his own country, to teach the art to his countrymen.

As soon as Caxton reached England he took premises near to Westminster Abbey. Assisted by the Abbot of Westminster, he erected the first printing-press ever set up in England. This was about the year 1471. The first book he printed was entitled, "*The Game and the Playe of the Chesse*, translated out of the French, fynysshed the last day of Marche, 1474." The second book was *A second edition of the same*, folio (with woodcuts); the third book, "*A Boke of the hoole Lyf of Jason*," which was brought out in the year 1475. The woodcuts with which Caxton adorned his books were the earliest known specimens of wood-engraving, but of course they were of a very rough kind. The type used by Caxton was of five distinct kinds, all of the character which we call "black letter," or "old English."

Under the patronage of the Abbot of Westminster Caxton flourished for some time, and was honoured by his countrymen for his efforts. It was well, however, that the abbot was his friend, for the clergy were divided in their opinion as to the effects of the new wonder. The Bishop of London is said to have used this remark-

* Vol. iii. p. 370.

able expression: "If we do not destroy that dangerous invention it will destroy us,"—so afraid were the teachers of error of the progress of truth. On the other hand, the men of learning and genius were overjoyed, and warmly encouraged Caxton in his efforts. They saw how rapidly he would spread the fruits of their labours. The Earls of Worcester and Rivers were two of the most learned and accomplished nobles of the day; they also patronised the great printer, and translated works for his press. It is also said that Caxton worked under the protection of the king. In Lambeth Palace there is a drawing of his presentation at court by Lord Rivers.

The number of books and pamphlets printed by Caxton in England was upwards of sixty. This is a very large number, when we consider that he did not begin in England until the prime of his life was spent. Printing must also have been very slow work at first. Before his death Caxton had

the pleasure of seeing the work he had begun in a fair way of being well carried out. Four foreigners, whom, it seems, he brought over as assistants, and an Englishman, were busily engaged in the pursuit. One of the foreigners, named Wynkyn de Worde, afterwards became very eminent.

In the year 1491 or 1492 Caxton died, having lived to the age of nearly eighty years. His last work was his "Lives of the Fathers," which it is said was finished by him on the last day of his life. It is pleasant to think that this good and useful old man enjoyed his faculties to the very last. His was an honourable life, and his name is worthy to be always remembered.

Caxton was buried in St. Margaret's Church, Westminster. In the parish accounts for the two years 1491 and 1492 are these two entries:—

Item: *Atte bureyng of William Caxton iiiij torches vj viijd.* (6s. 8d.). Item: *for the belle at same Bureyng vjd.* (6d.).

THE LADY-BIRD.

LADY-BIRD ! Lady-bird ! fly away home ;
The field-mouse is gone to her nest,
The daisies have shut up their sleepy red eyes,
And the bees and the birds are at rest.

Lady-bird ! Lady-bird ! fly away home ;
The glow-worm is lighting his lamp ;
The dew's falling fast, and your fine speckled wings
Will be wet with the close-clinging damp.

Lady-bird ! Lady-bird ! fly away home ;
The fairy bells tinkle afar ;
Make haste, or they'll catch you, and harness you fast
With a cobweb to Oberon's car.

ANON.

RECAPITULATION.

P. We have now ended the first part of our lessons on Botany, and I will now give some questions which you may answer by exercising your minds. Next week you shall have a series of questions, with answers, which you may *commit to memory*.

1. I am going to describe to you an animal and a vegetable. Tell me which is the animal and which is the vegetable.

There is an object in the back garden which has life. It has organs; it takes food; it grows; it has a skin; some of its parts are solid and some fluid; it can be used as an article of food.

Ion. I say that it is a *vegetable*.

P. I have told you before, Ion, that you should never say anything until you have listened well, and have thought. I have not finished the account yet.

The object has only one mouth for procuring its food: but it is not fixed in the ground; it can fly about from place to place, and it has limbs; its skin is covered with feathers.

The second object also has "limbs," but it does not move about from one place to another; so we find that it has several mouths. It has no stomach for digesting its food, which is always fluid, and is digested by a multitude of little organs. These again also seem to act as lungs, and to breathe; at the same time they form a covering for the limbs which I spoke of.

Which is the animal—the first or the second object?

Ion. The first is the animal; it is the little sparrow which I see perched on the laurel-tree. The second object is a vegetable; it is the laurel-tree itself.

P. Right. I will give you another question.

2. Mention two great divisions into which the vegetable kingdom may be arranged.

3. Give me a general name for the lichens, mosses, sea-weeds, and ferns.

4. Mention the five principal parts of a flowering-plant.

5. What do you call the part which procures the sap for the plant? 6. The parts which convey the sap? 7. The part which elaborates or *thickens* the sap.

8. Which organs convey the thickened sap downwards?

9. What do you call the little organs of the root which collect the moisture?

10. What do you call the little organs in the leaves which exhale moisture?

11. Mention some other little organs on the leaves which also collect moisture from the air?

12. Would you call a *carrot* a "root"?

13. Why not?

14. What do you call it, then?

15. What is a potato?

16. What functions have the potato, the turnip, and the carrot, alike?

17. Why do not potatoes flourish as well in hot as in temperate countries?

18. In what tree has the pith

TUESDAY.

PLEASANT PAGES.

BOTANY.

a function similar to that of the potato? Why is it similar?

19. Which part of the seeds of a plant is made for a like purpose?

20. Which part of an egg may be said to have a similar function?

21. What do you call the root of an onion, or a lily?

22. What do you call plants which spring up, flower, and die in *one* year? 23. Plants that last *two* years? 24. Plants that last more than two years?

25. Suppose that you arrange plants according to the place in which they grow, give me general names for those which grow in the sea, those which grow in the rivers, and those which grow on the land.

26. Mention a particular plant of each kind.

27. Where does the *mistletoe* grow, and what sort of a plant do you call it?

28. The *ivy* also?

29. Mention the principal parts of the stem.

30. What is the function of the pith? 31. Of the sap vessels?

32. Of the bark? 33. The medullary rays?

34. What is the meaning of the Latin word *medulla*?

35. What name is given to the dark-coloured, hard wood in the centre of the stem?

36. How does it become hard?

37. When the stem grows by adding a new ring of wood *outside* that formed the year before, what name do you give to the plant?

38. What name do you give to the plants with stems which

grow by adding new wood *inside* that of the previous year?

39. Tell me the names of some exogens?

40. Mention some endogens?

41. What is the meaning of the word *stomata*?

42. What organs in our skin may the stomata of a plant be compared to?

43. Why may the leaves also be compared to our lungs?

44. In which part of the plant are the stomata found?

45. Generally, on which side of a leaf are the stomata more numerous? Why?

46. Why is the upper side of a leaf more green than the under side?

47. You say that the upper side is greener because it has more green tissue; why is this?

48. Which side has more colour in the leaf of the garden flag? Which side has more stomata?

49. In the water lily, are the stomata on the upper or the under side?

50. Why?

51. When the sap of a plant reaches the leaf, what causes the watery part to pass off in vapour?

52. What gas does the leaf absorb to thicken the sap, and render it nutritious?

53. Of which two gases is carbonic acid gas composed?

54. What does the leaf do to the carbonic acid gas?

55. When the leaf has separated the oxygen from the carbon, which gas is made use of to thicken the sap?

56. Why cannot plants grow in the dark alleys of London?

57. What useful substance was formerly part of a stem, and is nearly all carbon?

58. Even if the streets of a crowded city have light, why do not the plants flourish there?

59. You say that there is too much carbon in the air—where does such carbon come from?

60. Why do the stalks of celery become white when the gardener covers them over with earth?

61. Which are the finest trees in a forest, the outside or inside trees? Why?

62. Which side of a forest tree has the most branches?

63. Why does our geranium in the flower-pot turn its leaves round to the window?

64. Have all plants their leaves placed on the stems in the same way?

65. When do you say that the leaves are opposite? When are they alternate? When are they whorled?

66. What do you call the point on the stem where the leaf is joined to it? The spaces on the stem between those points?

67. What is the difference between a simple and a compound leaf?

68. What do you call a compound leaf of three leaflets? Of more than three leaflets?

69. When the leaflets grow on the side of the mid-rib, what do you call such a leaf?

70. What, when they grow on the veins of the side-rib?

71. When do you say that a leaf is *peltate*? Mention one of that description.

72. Mention twelve different shapes of simple leaves?

73. What *appendages* have leaves?

74. What is the difference between a thorn and a prickle?

75. What are the functions of hairs?

76. In what kind of situations do leaves become hairy.

77. Certain hairs have glands at the roots, filled with poisonous fluid; what do you call such hairs?

78. What difference is there in the veins of the leaf of an exogen, and of an endogen?

79. What name do you give to the thick viscid substance formed by the descending sap?

80. Of what is cambium composed?

81. Of what gases are gum and sugar formed?

82. What other gas should they contain in order to support animal life?

83. Mention some of the secretions formed by plants; the nutritive substances (containing nitrogen) found in seeds.

84. The oils procured from seeds.

85. For what is the bark useful?

86. Do you know any dyes which are formed from the secretions of plants?

87. Which part of the plant differs from those before mentioned because it is an *organ of reproduction*?

88. If I were to show you a part of a plant with a peduncle, bract, calyx, corolla, stamen, pistil, and ovary, what would you call such a part?

89. If it had three petals in

its corolla, would you call it an exogen or an endogen?

90. If it had five petals, what would you call it?

91. If I showed you a part which consisted of a filament and an anther, what name would you give to it?

92. But if its two parts were called stigma and style, what name would you give to it then?

93. What do you call the organ which contains the ovules of the flower?

94. Why do you call those little organs *ovules* instead of *seeds*?

95. When does an ovule become a perfect seed?

96. Where does the germ it then contains come from?

97. How does the germ pass from the anther to the ovary?

98. When is the pistil of a flower longer than the stamens?

99. Is the pistil generally longer or shorter than the stamens when the flowers are upright?

100. What do you call those flowers which only contain a pistil?

101. Those which only contain stamens?

102. When you do not find the stamens and pistil on one flower, how is the pollen conveyed from the staminiferous to the pistilliferous plants?

103. The ovary of a plant sometimes has several divisions; what are those divisions called?

104. Mention an ovary which is thus divided, and is used as an article of food?

105. When an ovary thus contains sweet pulp, and is used as a pleasant food, what do we generally call it?

106. Mention several fruits in which you have noticed seeds.

107. From which part of the flower are stamens sometimes formed?

108. When a plant is well cultivated, in a good soil, what change do the stamens undergo?

109. Mention some flowers in which the stamens are sometimes changed into petals.

110. What sort of flowers do you call them?

111. Can you procure seed from them? Why not?

112. Mention the different parts of the seed.

113. How many cotyledons have the seeds of exogens?

114. What is the principal function of the cotyledons?

115. In what seed do the cotyledons remain under ground?

116. Where there is only one cotyledon, or when the cotyledons are only thin leafy substances, how is the nourishment of the young plant provided for?

117. What is the upper part of the germ called?—the lower part? 118. In which direction does each grow?

119. What are the four conditions necessary for the growth of a seed?

120. Why is the starch of that seed changed into sugar?

121. Why will not seeds grow if you set them too deep in the earth? Why do they not sprout in the winter?

THE TUDORS.

ELIZABETH.

After the death of Mary Queen of Scots, the next great event of Elizabeth's reign was the attempted invasion by the SPANISH ARMADA.

The Spanish Armada was an immense fleet of vessels fitted out by Philip II., King of Spain, who intended to conquer England. Philip was then one of the most powerful kings of Europe; and had two reasons for invading this country. His first reason was a very bad one; he was very angry with Queen Elizabeth because she would not marry him. He left England in a rage at being refused, and determined to take his revenge on the country. His second reason for fitting out the Armada was worse than the first. He was the principal Catholic monarch of Europe, and he thought that if he could conquer England he should support the religion of the Pope, exterminate the Protestants, and thus gain great glory. A third reason for the expedition was, that Philip was displeased with Elizabeth for helping his Protestant subjects in the Netherlands, with whom I told you he waged war for twenty years.

All the Papists of Europe looked forward with hope to Philip's expedition. The Pope gave it all the help of his influence. He published a "crusado" against Elizabeth, declaring her dethroned. He

also said, as he had said of her father, that her Roman Catholic subjects were not to obey her; and he added that he would grant "indulgences" to all who would help to dethrone the heretic. On this, nobles and volunteers of all kinds came forward from several kingdoms in Europe to assist Philip.

These great preparations spread terror and consternation amongst the English. But Elizabeth, although she was a woman, had a stout heart, and showed no fear. She had not so many ships as the Spaniards had, but she knew that she had brave and faithful men to command them. So, the year before the Armada was ready, Elizabeth sent one of her great admirals, Sir Francis Drake, to attack the Spaniards, and show them what sort of an enemy they would have to fight with.

Sir Francis, therefore, set sail with a few ships, entered the port of Cadiz, and burned about one hundred vessels which were fitted with stores and ammunition for the Great Armada; and, after doing other mischief, he set sail for Cape St. Vincent. Here he took the castle and three other fortresses; then, sailing to the Azores, he seized a rich prize, and brought it home to England. In this expedition he taught the Spaniards to fear him, and taught the English to despise

the huge heavy ships of the enemy.

Philip's preparations were no doubt delayed by the attack of Drake, but in the next year, 1588, he was ready. He had been five years preparing his great Armada; and, when he viewed the crowd of immense vessels, his heart and those of his people were filled with amazement at the sight. They had confidence, and mighty hopes, from the great deeds they had determined to do. You will not wonder at this when I tell you that the number of vessels was 130, being larger than any fleet that had ever been seen in Europe; more than half of these were great five-decked vessels called galleons. Besides two thousand volunteers from the distinguished families of Spain, the soldiers on board numbered 19,295, and the mariners 8,050; there were about 2,000 rowers in the galleasses and galleys.

In addition to this gigantic army Philip had raised great forces in the Netherlands. The active general, the Duke of Parma, was ready with 30,000 foot and 4,000 horse, and a large number of flat-bottomed vessels to transport them. No wonder, then, that the Spaniards felt great exultation. They called their fleet "The Invincible Armada," by which was meant that it could not be conquered.

But let us turn to England, and see how the Queen made ready for the enemy. At first her fleet did not amount to more than thirty ships, which

were much smaller than those of Spain. The merchants and all classes of people, however, helped; the citizens of London lent the Queen large sums of money; they were directed to furnish fifteen ships and 5,000 men, and they sent instead, thirty ships and 10,000 men. At length the English fleet numbered 181 ships; some were very small, but they were more manageable than those of the enemy.

The command of the English fleet was given to Lord Howard of Effingham. The three great admirals, Drake, Hawkins, and Frobisher, assisted him, and waited for the enemy at Plymouth. The whole navy was not, however, stationed there; a small squadron of forty vessels was stationed on the coast of Flanders, to prevent the Duke of Parma from bringing over his troops in his flat-bottomed boats.

The English army amounted to 80,000 men, part of which were stationed at Tilbury Fort, opposite Gravesend, and were commanded by the Earl of Leicester. The courage of the Queen gave great confidence to the men. She visited the camp at Tilbury, rode through the ranks, and addressed the soldiers in animating language: "I know," she cried, "that I have but the body of a weak and feeble woman, but I have the heart of a king, and of a King of England, too; and I think foul scorn that Parma, or Spain, or any prince of Europe should dare to invade the borders of my realms. I

myself will take up arms; I myself will be your general, judge, and rewarder of every one of your virtues in the field!"

Such were the preparations made by the Protestant Queen to meet the Roman Catholic force. No doubt the Reformers looked on from all countries in Europe. They thought that this enterprise would decide for ever the fate of their religion. Had they thought more, they might have learned that the success, of any religion cannot be decided by the sword.

A full history of the fight between the English and the Spaniards is preserved in the British Museum. It would take a very long time to read the whole. I will give you a part of an account that has been written:—

"Upon leaving the port of Lisbon, the Armada the next day met with a violent tempest, which sunk some of their shipping, and obliged the fleet to put back into harbour. After some time spent in refitting, they again put to sea, where they learned from a fisherman that the English fleet, hearing of the dispersion of the Armada in a storm, had retired back into Plymouth harbour, and most of the mariners were discharged. From this false intelligence the Spanish admiral, instead of going directly to the coast of Flanders, to take in the troops stationed there, as he had been instructed, resolved to sail for Plymouth and destroy the shipping laid up in that harbour. But Effingham, the English admiral, was very well prepared to receive them; he was just got out of port when he saw the Spanish Armada coming full sail towards

him, disposed in the form of a half moon, and stretching seven miles from one extremity to the other.

"The English admiral, seconded by Drake, Hawkins, and Frobisher, attacked the Armada at a distance, pouring in their broadsides with admirable dexterity. They did not choose to engage the enemy more closely, because they were greatly inferior in the number of ships, guns, and weight of metal; nor could they pretend to board such lofty ships without manifest disadvantage. However, two Spanish *galleons* were disabled and taken.

"As the Armada advanced up the Channel the English followed in their rear; and their fleet continually increasing from different ports, they soon found themselves able to attack the Spanish fleet more nearly, and fell upon them while they were taking shelter in the port of Calais. To increase their confusion, Howard, in the night, took eight of his smaller vessels, and, filling them with combustible materials, sent them, as if they had been fire-ships, one after the other into the midst of the enemy. The Spaniards, taking them for what they seemed to be, immediately took flight, in great disorder; while the English, profiting by their panic, took or destroyed about twelve of the enemy.

"After much more fighting, and many misfortunes from the weather, the Armada was defeated. Many ships were taken, others were burned, and others were wrecked. Of the whole Armada only fifty-three ships returned to Spain, in a miserable condition. The seamen, as well as soldiers, who remained, only served by their accounts to intimidate their countrymen from attempting to renew so dangerous an expedition."

On the retreat of the Armada there was, of course, great joy amongst the English and the Reformers of Europe. Several medals were struck by the Dutch to commemorate the event. On one was the inscription, *Venit, vidit, fugit*—"It came, it saw, it fled." On another, *Dux fæmina facti*; that is, "A woman was conductor of the exploit." Another, a very large medal, contained the words, *Flavit Jehovah et dissipati sunt*—"Jehovah blew and they were scattered."

Another result of this victory was that the English gained more courage. They in their turn attacked the Spaniards. The commanders Raleigh, Howard, Drake, Cavendish, Hawkins, and Frobisher, were the boldest and ablest seamen England ever produced. Supported by these men, and by the active Elizabeth, who had before been styled *Queen of the Northern Seas*, the English navy attained that superiority over all others which it has since preserved. •

THE BETTER LAND.

"I HEAR thee speak of the better land,
Thou callest its children a happy band;
Mother! oh, where is that radiant shore?
Shall we not seek it and weep no more?
Is it where the flower of the orange blows,
And the fire-flies glance through the myrtle-boughs?"
—“Not there, not there, my child!”

"Is it where the fentherly palin-trees rise,
And the date grows ripe under sunny skies?
Or 'midst the green islands of glittering seas,
Where fragrant forests perfume the breeze,
And strange, bright birds, on their starry wings
Bear the rich hues of all glorious things?"
—“Not there, not there, my child!”

"Is it far awny, in some region old,
Where the rivers wander o'er sands of gold?
Where the burning rays of the ruby shine,
And the diamond lights up the secret mine,
And the pearl gleams forth from the coral strand—
Is it there, sweet mother! that better land?"
—“Not there, not there, my child!

"Eye hath not seen it, my gentle boy!
Ear hath not heard its deep songs of joy;
Dreams cannot picture a world so fair,
Sorrow and death may not enter there.
Time doth not breathe on its sadless bloom,
For, beyond the clouds, and beyond the tomb,
—It is there, it is there, my child!"

ETYMOLOGY.

CHAPTER III.

RECAPITULATION.

P. To-day we will learn our memory lesson on the Pronouns, Adjectives, and Adverbs; and before we begin our long lesson on the verbs I will give you some questions to recapitulate.

Memory Lesson 4.

ETYMOLOGY.

THE INFLECTIONS AND DIFFERENT SORTS OF PRONOUNS, ADJECTIVES, AND ADVERBS.

1. ADJECTIVES may express different quantities of any quality. They are therefore inflected, to show the difference in their value. Thus we have red, redder, reddest.

These changes are called "degrees of comparison." Red is "the positive degree," redder "the comparative," and reddest "the superlative degree."

There are different ways of forming these degrees. In adjectives of one syllable they may be formed by adding er and est, or r and st, or they may be formed quite irregularly. Adjectives of more than one syllable have more and most added to the positive degree.

2. There are certain pronouns which are not used instead of nouns. They are placed after nouns because they relate to them. They are therefore called RELATIVE PRONOUNS. "The girl who went up stairs." "The horse which I sold." "The boy and dog that we saw."

"Who" is used for persons, "which" for things, and "that" for either a person or a thing, or for both. The noun preceding the relative is called its "antecedent."

3. Besides the "personal" and "relative" pronouns, there are others which are used like adjectives, and are therefore called "adjective pronouns." There are four kinds, namely: the DISTRIBUTIVE, DEMONSTRATIVE, INTERROGATIVE, and INDEFINITE pronouns.

4. ADVERBS point out different circumstances relating to verbs. They may show how, when, where, how much, and how many times, an action is performed. Thus we have Adverbs of manner, such as "splendidly"; Adverbs of time, such as "now"; Adverbs of place, such as "here"; Adverbs of quantity, such as "much"; Adverbs of number, such as "twice". There are also Adverbs of affirmation and negation, such as "yes, indeed; no, not."

QUESTIONS.

1. Here is a class of curious-shaped things. a b c d e f g h i j k. What are they called?

2. What do they express when used alone—sense or sound?

3. Point out one which, when used alone, expresses more than sound: it has a most important sense to the person who speaks it.

FRIDAY.

PLEASANT PAGES.

GRAMMAR.

4. How many are there in the whole class?
5. What name is given to the class?
6. Here is an "order" in the class a-e-i-o-u-y—what are they called?
7. And all the rest are—?
8. How many letters are needed to form a syllable?
9. How many to form a word?
10. What is the difference between a syllable and a word?
11. When is one syllable called a word?
12. What is meant by the words *mono-syllable*, *dis-syllable*, *tri-syllable*, *poly-syllable*?
13. What do you call that part of grammar which relates to the letters, and to the spelling of words and syllables?
14. Here are two sentences: "I have hope." "I hope I have." What part of speech is the word *hope* in the first sentence? What in the second?
15. What is a NOUN?
16. What is an ADJECTIVE? Is it a dependent or independent word?
17. What is a PRONOUN?
18. What is a VERB?
19. Why do you call *to dance* a verb?
20. Why do you call *I am* a verb?
21. Why do you call *I am bitten* a verb?
22. What is an ADVERB?
23. Why may it be compared to an adjective?
24. What is an ARTICLE?
25. For what purpose are articles placed before nouns?
26. Why do you say *an* instead of *a* before a noun beginning with a vowel?
27. You call *a* or *an* an indefinite article, and *the* the definite article. What do you mean by the words definite and indefinite?
28. What is a PREPOSITION?
29. In this sentence: "You laugh at me," the preposition shows the relation between a verb and a noun. Which is the preposition? Supply another showing a different relation.
30. "*I sent the apple to you.*" Between what words does *to* show the relation? Change the preposition to show a different relation. •
31. Make a list of six prepositions.
32. What is a CONJUNCTION?
33. Alter the conjunctions in these sentences: "I will come when I can." "John and James will meet you." Make three more sentences, each having a different conjunction.
34. What is an INTERJECTION?
35. From what Latin words are the words Conjunction and Interjection derived?
36. What is the derivation of the word Preposition?
37. Of the word Article?—Adverb?—Pronoun?—Adjective?—Noun?
- 38.—Make a noun and an adjective from the verb *to brew*.
39. Make a verb and a noun from the adjective *sweet*.
40. A verb and a noun from the adjective *red*.
41. Give me the two principal classes of nouns.
42. Here is a proper noun—"Thomas." Give me a common name for the same person.
43. How many genders have nouns? Mention them.

THE FOREIGN TRAVELLER.

ITALY.

"MY DEAR CHILDREN,—

"You have heard from me of the important group of cities at the north of Italy; of *Venice*, *Genoa*, *Pisa*, *Bologna*, *Turin*, *Milan*, and *Mantua*; *Padua*, *Leghorn*, and *Florence*.

"ROME."

"In the middle division of Italy is the ancient city of *Rome*. Rome is the capital of Italy; once it was the chief city in the world. It is now a large place, for the measurement round it is thirteen miles. But it is not so fine as it seems to be from a distance. There is a great deal of waste-land; some streets are of immense length, others are half built, others are narrow and crooked; sometimes the most splendid places are surrounded by the most miserable huts. Rome is divided into fourteen quarters. The principal street is the *Corso*; which is the finest street in Europe. The fashionable people drive and ride up and down it, and the races and carnivals are held there.

"The river on which Rome is situated is called the *Tiber*. It is stained a deep yellow by the rich-coloured soil which it washes away from its banks. It is said to glitter along the plain like a belt of gold.

"The principal buildings are the Palace of the celebrated Pope, *Barberini*, which contains a library of 60,000 volumes; the Column of *Trajan*;

and the Quirinal, one of the residences of the Pope. Indeed the city is full of noble palaces and churches, and, above all, there is the Church of St. Peter, which is the largest in the world. It was built during the reigns of eleven Popes, and cost the enormous sum of £12,000,000; it would have cost three times as much in these days. Here is the *Vatican*, another residence of the Pope, containing a library of 160,000 volumes. But although the Pope has a large church, it does not make him a good preacher. You know he is the chief priest of the Roman Catholic religion. He pretends that he is the successor of the Apostle Peter, and that he lives on the earth in the place of Jesus Christ.

"On a certain day in every year the Pope washes the feet of thirteen men. He does this that he may be like Our Saviour, who washed the feet of his apostles. 'The thirteen men sit in a row on a bench in St. Peter's Church. They are dressed in white with white caps, and each holds a nosegay in his hand, while the Pope with a golden jug and a golden basin performs the ceremony. Afterwards they go into his palace to dine.'

"The number of priests at Rome is very great. There are a college of Cardinals, six Archbishops, and seventy-two Bishops.

"There is not much trade at Rome; nor is there any great manufacture. Large sums of money are spent every year in wax and fish; but it is said that all the bees in Italy cannot make sufficient wax for the numerous wax-candles burned in the churches. The fish is brought to Rome and the other cities to be eaten on fast-days; and as there are 160 fast days every year, the quantity consumed is enormous.

"NAPLES.

"Rome is the principal city in the middle of Italy, the dominions of the Pope. So Naples is the principal city of Southern Italy; it is the capital of the kingdom of Naples.

"Rome is a truly 'splendid' city, but Naples is far more 'beautiful.' It is built on the shores of a bay which is the shape of a half-moon. The houses are on the hills which slope down to the sea. The view of the Bay of Naples and the city from the sea is said to be the most splendid in the world; for, besides the beautiful city, and the clear water, and the bright sky, there rises behind the houses a tall mountain from which smoke is always issuing; it is called *Vesuvius*. You know, I dare say, what a terrible mountain this is; how it sends forth fire and smoke and lava. Such mountains are called volcanoes.

"Naples is a lively, noisy place, for the streets are much crowded during the day. The crowd is sometimes greater

than that in London. Great numbers of the poor people have no place to live in. As the climate is very warm, they sleep out of doors at night, under the porticoes and archways of the great churches and palaces. In the day-time these men do very little. Their great delight is to do nothing. They will bask in the sun, and go to sleep for hours. This state of enjoyment they call the *dolce far niente*, 'the sweetness of doing nothing.'

"But you will ask, 'How do they get food to eat?' Not by working, if they can help it. It is said that in Naples 20,000 of these idle and lazy fellows rise every morning, and depend for their food on the chances of the day. Dozens of these wretched creatures will follow a stranger, begging that 'his excellency' will throw them a few soldi. If the beggar succeed in getting a little money, off he goes to the stall where the maccaroni or melon is sold, and makes a good meal. But if at last, however, he can do nothing else, he will go down to the sea-side and catch some shell-fish, of which there are plenty in the bay. But these *frutte di mare* (fruit of the sea), as they are called, are fastened to the rocks in very deep water, and the time which the poor men will remain under water when procuring them is truly astonishing.

"These idle men are called *lazzaroni*. With their immense number, and the priests, monks, fiddlers, lawyers, nobility, footmen, and all kinds of vagabonds,

the city is crowded with men who do not produce anything to increase its wealth. It also contains a great number of nobles who are very fond of show and splendour; about one hundred of them are called 'Princes.'

"The King of Naples is not a good man; he is a tyrant. Most of the nobles are also tyrants.

"Not far from the city of Naples are the ruins of the two great cities, *Herculaneum* and *Pompeii*, which were suddenly and completely buried under

the lava and ashes from Vesuvius, A. D. 79.

"But you have heard enough of Rome and Naples. You may remember that Rome is grand, and Naples beautiful; though I don't think you would like much to live in either city. The Italians are not a happy people, neither have they good governments. We will next week have a word or two on their government and character before making the 'lesson'

"Believe me, dear children,
"Your affectionate friend,
"UNCLE RICHARD."

HELP YOURSELVES.

'Tis a lesson good and wise—
Work hard—Help yourselves!
God e'er helpeth him who tries—
Work hard—Help yourselves!
If you strive with might and main
That which you desire to gain,
Long you will not strive in vain—
Work hard—Help yourselves!

Wait not idly while you want—
Work hard—Help yourselves!
Never stand and say you can't—
Work hard—Help yourselves!
Lo! the little ant and bee
Work away right heartily,
Asking aid from you nor me—
Work hard—Help yourselves!

Why should others work for you?
Work hard—Help yourselves!
Why do that which you might do?
Work hard—Help yourselves!
If in vain your effort's made,
Hands are ever raised to aid
One who's not of work afraid—
Work hard—Help yourselves!

H. G. ADAMS.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

20th Week.

MONDAY. Moral Biography.

INDUSTRY.

BENJAMIN FRANKLIN, THE PRINTER.

P. I AM going to talk of another printer to-day.

L. Was he as industrious as William Caxton?

P. Well, I should think he was quite so. I do not know that he made any great improvements in the art of printing, but he is celebrated for the wonderful perseverance by which he raised himself from obscurity and the greatest poverty to be one of the most distinguished and richest men in America. I cannot say that his life has much connection with the Great Exhibition, except for the discoveries he made in electricity, but it had a great connection with the subject of *Industry*.

A course of lessons on Industry would hardly be complete without his example.

L. Then, papa, please begin.

THE LIFE OF BENJAMIN FRANKLIN.

P. At the beginning of the last century there lived at Boston, in North America, a man who had seventeen children! that is a great number; and you can imagine that to find bread-and-butter, and shocs

and stockings, and everything else for those seventeen children, must have been hard work for that poor man.

The name of this man was Franklin. He followed the business of a soap-boiler and tallow-chandler; and, as he had not been brought up to that business, you can understand why it is said that "he brought up his family with difficulty."

The youngest but two of this large family was named Benjamin, and this is the lad whose example I intend to put before you.

When Benjamin Franklin was eight years old he had learned to read, and his father thought him a clever boy; so he said that he should be made a clergyman, and sent him to the grammar school. Benjamin's uncle also thought him a clever boy, and thought also that he would make a good clergyman. The uncle was himself an ingenious man, and, although only a common silky-dyer, he had been a great reader and writer in his day. He had several volumes filled with sermons, which he had taken down in a short-hand of his own invention; so he said

to his nephew, "You may have these to set up with."

Before Benjamin had been a year at the grammar school, however, he was removed. When his father reflected, he saw that he could not afford the expense of a college education for him, and he was placed under a teacher of writing and arithmetic. At the end of another year, when the boy was ten years old, he was taken home again and placed in his father's shop, to make himself useful. He was now employed, as he tells us, to cut wicks for candles, to fill moulds for cast candles, to attend the shop, to go errands, and to do other drudgery of that sort. But this occupation did not please him at all. He did not behave well under it. He ought to have remembered that he had to do what his father told him, and not what he liked. He ought to have known, too, that it is an honourable thing to earn one's bread in any way. But he did not think of this, and he showed so much dislike to the business, that his father was afraid he would run away and go to sea, as one of his elder brothers had done.

After two years, therefore, his father bound him apprentice to his brother James, who had just set up in business as a printer, in Boston. He was then twelve years old, and it was agreed that he should remain with his brother until he reached the age of twenty-one.

During his apprenticeship Franklin's character developed

itself. He had already read most of his father's books, but now, as a printer, he managed to make acquaintance with some booksellers' apprentices. These apprentices used to borrow books from their masters' shops in the evening and lend them to him. He would then sit up the greater part of the night to read them, and would return them in the morning lest they should be missed. After some time he gained access to a large number of books. A liberal-minded merchant was in the habit of frequenting the printing-office, and was attracted by the boy's intelligence and attention to business. He therefore invited him to come and see his library, and allowed him to borrow such books as he wished to read.

Benjamin not only tried to improve himself by books, but by making verses. He wrote a great number of pieces, but his poetical fit did not last long. His brother induced him to write two ballads, and, having printed them, he sent him to sell them through the streets: one of them, he tells us, sold prodigiously. But Benjamin's father heard of the circumstance; he sent for him, and soon brought down his rising vanity. He pointed out the many faults of his performance, and convinced him what wretched stuff the verses really were. He told him, too, that verse-makers were generally beggars; so his son determined to write no more ballads.

Another way in which young

Franklin improved himself was by disputing with a friend upon such subjects as they met with in the course of their reading. This friend began a discussion with him as to whether women should receive a learned education. They parted without settling the point, and Franklin therefore sat down, wrote all his arguments on paper, and sent them to his friend. This gave rise to a course of argument by letters, which correspondence came under the notice of Franklin's father. The father was again of service to his son. He pointed out to him that he fell far short of his opponent in elegance and clearness of expression, and in method. So from that moment Franklin determined to spare no pains to improve his style of writing. Having really determined to do it, he was not long in setting about it. But you shall hear how he improved himself, in his own words:—

"About this time I met with an odd volume of the 'Spectator'; I had never before seen any of them. I bought it, read it over and over, and was much delighted with it. I thought the writing excellent; and wished, if possible, to imitate it. With that view, I took some of the papers, and making short hints of the sentiments in each sentence, laid them by a few days. Then, without looking at the book, I tried to complete the paper again, by expressing each sentiment at length, in suitable words. Then I compared my 'Spectator' with the original, discovered some of my faults, and corrected them.

"But I found I wanted a stock of words, or a readiness in recollect-

ing and using them. Therefore, I took some of the tales in the 'Spectator,' and turned them into verse; and after a time, when I had pretty well forgotten the prose, turned them back again. I also sometimes jumbled my collection of hints into confusion; and, after some weeks, endeavoured to reduce them into the best order, before I began to form the full sentences and complete the subject. This was to teach me method in the arrangement of the thoughts.

"By comparing my work with the original, I discovered many faults and corrected them; but I sometimes had the pleasure to fancy that in certain particulars of small consequence I had been fortunate enough to improve the language. This encouraged me to think I might come to be a tolerable English writer, of which I was extremely ambitious."

This looks like determination and perseverance. One more word on his self-denial. He met with a book which recommended a vegetarian diet; that is to say, that he should live on vegetable substances and not eat any meat. The plans suggested in the book were agreeable to him on account of their cheapness. He therefore told his brother that he would provide his own food, if he would pay him every week only half of what it had hitherto cost. His brother agreed to this offer immediately, and even out of the small allowance Franklin managed to save half for the purchase of books. He also gained an advantage in this plan by saving time. "My brother, and the rest," he says, "going from the printing-house

to their meals, I remained there alone. I soon despatched my light repast (which was often no more than a biscuit, or a slice of bread and a glass of water), and had *the rest of the time* till their return, for study. In this I made greater progress from the clearness of head which generally attends temperance in eating and drinking." About this time he made himself master of "Cocker's Arithmetic," which he could never understand at school; he became acquainted with the "Elements of Geometry," the "Art of Navigation," "Locke on the Human Understanding," "Art of Thinking," and many other works.

Thus, dear children, you see that it is possible to love *hard work*. Franklin worked hard at his studies, because he made them a pleasure to himself. You may do so yourselves with your studies, or with anything else you may have to do, if you will only find out what there is of pleasure in it.

You may think, perhaps, that because Franklin took so much interest in his studies he would

neglect his business; but such was not the case. During all this time he also worked hard as a printer, because it was his duty. He ought to have felt a pleasure in printing *because* it was his duty, and perhaps he did. I dare say, too, that, with his habits of perseverance, it was easy to him to work hard; for you may read in his life that, although he improved his mind by reading, by writing poetry, by argument, and writing letters of argument, by his exercises from the "Spectator," and by his studies during the dinner-hour, and before and after work, often during the night,— yet with all this he acquired great proficiency in his business, becoming more useful to his brother every day.

How much even a boy can do if he is determined to make the most use of his time! When, in order to save money and time, Benjamin Franklin determined to live without animal food, he was only sixteen years old.

W. And that is a time when boys are growing, and feel very hungry: I call that great self-denial.

THE ROBIN.

SWEETEST songster of the grove,
Little darling Robin, come;
Hast thou from thy lonely wood,
Make this cherry-tree thy home.

When my breakfast is prepared
I will pay thee for thy song;
Half my bread thou shalt divide
With thy little hungry throng.

And when round thy quiet nest
The cherries hang so ripe and sweet,
Robin, thou shalt have a share
For thy little ones to eat.

ANON.

THE TUDORS.

ELIZABETH.

P. I SAID that after the defeat of the Spanish Armada, the English frequently attacked the Spaniards. Many made themselves famous by their daring exploits, and amongst these was the Earl of Essex, a young nobleman of great bravery and of pleasing manners.

In those days Spain was not only very powerful, but she was one of the richest countries in the world, in consequence of the golden treasures brought from the newly-discovered country, America. In Elizabeth's reign the English were not less fond of war than they had been; they did not see that it was wicked to attack their neighbours and plunder them. We read, therefore, that the Earl of Essex and Admiral Howard took the city of Cadiz, plundered it, destroyed its ships, and did damage which cost the Spaniards twenty millions of ducats.

There are many instances of robbery committed by the English. Essex knew that numerous galleons—the great Spanish ships with four decks—were constantly crossing the ocean from America to Spain, being laden with immense cargoes of gold. Essex made an agreement with another famous man, named Sir Walter Raleigh, saying, "Let us stop these galleons and seize their treasures." Accordingly they fitted out a great fleet for the

purpose, and sailed for the Azores to wait for the Spanish ships. Other adventurers did likewise. Such a course was most disgraceful robbery; and highway robbers on the sea are not more deserving of respect than highway robbers on the land. But the English people did not think so, and the earl became a general favourite; not only with the nation, but with the Queen. It was supposed that Elizabeth liked him so much that she thought of choosing him for her husband. Being thus favoured, he was raised to very high honours; and when, in the year 1598, the Queen's good old secretary, Lord Burleigh, died, Essex was entrusted with the most important public duties.

Burleigh, however, had been a servant of the state for forty years; and, although he was not a very clever man, he possessed much knowledge, and was very prudent. Essex was not so serviceable to the Queen as Burleigh had been. He was not only too young, but, like many others who have not experience, he had too much confidence in himself. Being flattered with his popularity, and the Queen's favour, he thought himself to be more clever and to be of more importance than he really was. He was once disputing with Burleigh before the Queen, when he offended her majesty

so that she gave him a box on the ear. Shortly after Burleigh's death Essex was sent to Ireland to subdue a rebellion which was headed by the Earl of Tyrone. Essex did not succeed well in this enterprise, and made peace with the enemy.

This failure was the beginning of a quarrel between the Queen and Essex which ended in his ruin. Essex hastily returned from Ireland without orders, to justify himself to her majesty. Elizabeth had before been provoked by his misconduct, and was now more angry than ever. She caused him to be brought to trial, but the result was that he was liberated, though not restored to favour; and the Queen ordered him to remain a prisoner in his own house until her further pleasure was known.

This order, and some other signs of the Queen's displeasure, only served to enrage Essex. Instead of being obedient, he depended on his favour with the people, and broke into open rebellion. Leaving his house, he sallied forth to make an insurrection in the city. Attended by only two hundred followers, armed with swords, he passed through the streets crying aloud, "For the Queen! for the Queen! a plot is laid for my life!" He hoped thus to induce the populace to rise to his assistance, but he was mistaken, for not a single person joined him. He was taken prisoner and conveyed to the Tower, and soon afterwards he was tried, condemned, and executed.

It was with real unwillingness that Elizabeth consented to the death of Essex. It is said that she signed the warrant for his execution, and countermanded it; again she ordered his death, and again resolved to pardon him. It appears that the Queen had, some time before, given Essex a ring, telling him that whenever he should be in danger, if he forwarded the ring to her he should have protection and safety. Elizabeth expected that Essex would send the ring; and it was found after his death that he had done so, but that the Countess of Nottingham, by whom he sent it, was his secret enemy, and did not deliver it. Elizabeth was therefore secretly angry at his obstinacy in not asking for mercy and forgiveness.

After the death of Essex Elizabeth did not enjoy one more happy day. Her distress was greatly increased when the Countess of Nottingham on her death-bed confessed the truth concerning the ring. When the dying woman asked the Queen's forgiveness for her treachery, Elizabeth turned from her, saying, "God may forgive you, but I never will." Her health and spirits then declined gradually. She lost all interest in her duties, and attended to business merely through habit. Two years afterwards she expired, in the seventieth year of her age, having reigned more than forty-four years—A. D. 1603.

THE TUDORS.

THE TIMES OF QUEEN ELIZABETH.

THE character of Elizabeth may be understood from the history of her reign. Amongst her peculiarities may be noticed her unwillingness to marry. The year after her accession the Parliament "addressed the Queen to marry," but she declined. The Duke of Anjou courted the Queen for ten years, and then left England in despair. Philip of Spain gave Elizabeth all the jewels of his first wife, but when he offered to marry her he was refused. You remember the consequences. King Charles of Austria, Eric of Sweden, and Adolphus of Holstein became suitors to the Queen, but she refused them all. The Earl of Essex seemed to have been more liked by her than any one else. Sir Walter Raleigh also was favoured by her. Elizabeth, however, remained unmarried until her death.

Another peculiarity of the Queen was her vanity and love of dress. She believed herself to have personal beauty, even when she was more than sixty years old. At her death it is said that three thousand dresses were found in her wardrobe.

Elizabeth had a taste for literature, which has been mentioned; she also sung and played well, and was passionately fond of dancing.

Perhaps the greatest peculiarity and the greatest fault of Elizabeth was her love of

power. In this she was like her grandfather, Henry VII., and all the Tudors. Henry, you may remember, greatly increased the power of the Crown, and his successors imitated him. Henry VIII. would never permit the Parliament to oppose his will. Mary was quite as arbitrary, but Elizabeth was the most self-willed of all. You have heard how, before the time of the Tudors, the liberties of the people were favoured in the contests for succession to the Crown. But there had been no such contest since the time of Henry VII. Through four successive reigns the birthrights of the sovereigns had been undisputed, and their power was not all dependent on the good-will of the people. Since the reign of Henry VIII. the sovereign had been also recognised as "the Head of the Church." Thus an idea was beginning to arise that the right of the Crown was derived from God, and that the people had nothing to do with it, except to obey.

Thus circumstances favoured Elizabeth's love of power. She did not fail to take advantage of the rising notions, and to impress them upon the people. From the beginning to the end of her reign Elizabeth and her ministers governed the nation. The power of the Parliament was a mere pretence—it was quietly

allowed in that assembly that the Queen was above all laws, and could make and unmake them at her pleasure.

This state of things led both to evil and good. Elizabeth carried out her own will by means of two courts of justice—the COURT OF STAR CHAMBER, for trying common offences; and the COURT OF HIGH COMMISSION, for trying offences connected with the Church. In both of these courts the judges held their places as long as their decisions pleased the Queen. When present Elizabeth was the sole judge. These courts gave the Queen and her ministers power to imprison any person in any jail as long as they might think fit. Spies were employed by them in all parts of the kingdom; it was in this way that the connection of Mary Queen of Scots with the conspiracy of Babington was discovered. In suspicious times, therefore, the jails were full of prisoners, who were sometimes thrown into dungeons, and loaded with irons, and put to the torture to make them confess. Fines were imposed on those who were thought guilty, and corporal punishment by whipping, branding, and slitting the nostrils and ears. The people had no redress against these enormities. When the Queen had determined to convict a prisoner, neither judge nor jury dared to acquit him.

The religious persecutions which Elizabeth carried on by means of the Court of High Commission were perhaps more than those of the Star Chamber.

There were great numbers who, from the beginning of the Reformation, thought that the Queen ought not to be styled "The Head of the Church," and that the national Church ought not to be connected with the State. They also disapproved of some of the "doctrines" taught in the church, and of the plan of worshipping God. There were many who, during the persecutions in Mary's reign, had fled to Geneva, in Switzerland. There they had learned the rigid doctrines taught by a celebrated reformer named Calvin, and they wished to worship God according to his plans. These men, and all others who did not agree to the doctrines of the established church, were called PURITANS. Amongst them was the celebrated John Knox, who, I told you, taught the reformed religion in Scotland.

The Queen, however, did not like that any doctrines but those of the established church should be preached, and she therefore persecuted both the Puritans and the Papists. A remarkable Act was passed, obliging her subjects to conform. By this Act they were obliged to repair once a month to the established church under pain of imprisonment or banishment. It was also enacted, that if any one followed a clergyman who was out of the established church, he should forfeit his goods and chattels for the first offence; he should be subject to a year's imprisonment for the second offence; and imprisonment during life for the third. These Acts were

relentlessly put in force during the latter part of the reign. It is said that the jails were crowded with victims. In Hampshire 400, and in Lancashire 600, were brought up for trial at one session, so that the counties complained of the expense of their maintenance; the Queen therefore ordered them to be discharged. Many were punished by whipping, or with a hot iron, as before mentioned.

Another cause of suffering was the visits by the Queen's officers to the private houses in search of Catholic clergymen. In 1584 fifty gentlemen's houses were searched in one night, and almost all the owners dragged to prison. Instruments of torture were often used to compel prisoners to confess; and it was not uncommon for the unhappy sufferers, in their agony, to accuse others and themselves wrongfully. These accounts are given by an historian who was himself a Catholic,* but whose truthfulness may be relied upon. It is also said, that during Elizabeth's reign no less than one hundred and eighty persons suffered death by the laws against Catholic priests and converts.

You will perhaps wonder that Elizabeth should be called "wise and good" after allowing such barbarous proceedings; but you must once more remember that this was a most barbarous age. It was at this time that the most horrible court of the "Holy Inquisition" was estab-

lished by the Papists in Spain. The Church of Rome was held in terror by most Protestants, and Elizabeth knew that to murder her would be thought an honour rather than a crime. The Puritans, also, were violent; and many were very fanatical. They were called Puritans because they wished to "purify" themselves from everything that bore any resemblance to the Roman Catholic church. Their earnestness to serve God, and their preachings, had a good effect, particularly the regard they paid to the Sabbath; but they laid the most serious stress on minute trifles. They caused a furious contention on the subject of square and round caps, because the former, which were worn by the students of the Universities, were like those of the Romish students; they also objected to the wearing of a surplice. Under the title of "Puritans" were found many strange men, who pretended to work miracles, and particularly to cast out devils. Other Puritans declared the Queen to be excommunicated as an enemy to Christ, and that, being so excommunicated, the people might kill her. There is, therefore, some excuse for the persecution caused by Elizabeth. Surrounded by enemies, she was most anxious for the safety of the Church of which she was the head, and for her own safety also. Although it was very wrong to compel Puritans or Catholics to attend church, it was her duty to restrain their attacks.

The persecutions by the
313

* Lingard, viii. 360.

Star Chamber and High Commission Courts were not the only evils arising from the Queen's great power. Both Elizabeth and Mary frequently collected money without the consent of the Parliament. They issued royal proclamations demanding "Benevolences," and compelling merchants to grant loans. The duties which we call "customs" were often increased on certain goods without consulting the Parliament. When any foreign war was commenced, Elizabeth, of her own accord, obliged the counties to raise soldiers, to furnish them with arms and clothing, and to convey them to the seaports, at their own expense. By another practice, called "purveyance," the Queen would victual (that is, provide food for) her court, and even for fleets and armies, at the expense of suffering individuals, whom she wished to oppress.

A still worse practice was resorted to by the Queen. It was that of granting to certain persons or companies the entire trade in particular articles. Such a privilege was called a *monopoly*, and those who possessed a monopoly for any article could prevent any other person from making or selling such goods. The Queen received large sums of money for these monopolies, but their effect on trade was most mischievous. Those who possessed them would often set what price they pleased on their goods, so as to make very large profits; thus the company who possessed the monopoly of salt

raised the price from fourteen pence to fourteen shillings a bushel. Sir Walter Raleigh had a monopoly of tin. The most remarkable monopoly was that granted to certain merchants for trading to the East Indies. In the year 1599 they purchased a charter from Elizabeth to last for fifteen years only. With a capital of only £30,000 they formed themselves into an association called *The Governor and Company of Merchants of London trading to the East Indies*; and thus began the renowned EAST INDIA COMPANY.

Perhaps even more evils might yet be pointed out, but yet all the mischief done in Elizabeth's reign was very small when compared with the good which, through the blessing of God, was brought about. Elizabeth, you have heard, had great talents; and so had her councillors. Her reign has been called the *Augustan age of England*;* and so it was. It was the time when the translation of the Holy Scriptures which we now use was undertaken, and the Protestant religion was re-established on a basis from which it could never be shaken.

The prosperity of England was in every way increased. Down to the reign of the first Tudor, Henry VII., there was no *navy* in England. Then the discovery of America gave rise to a spirit of commerce, and

* By this is meant that the "glory" of England in her time was as great as that of Rome in the time of the Emperor Augustus.

from that time to the reign of Elizabeth the ships of England multiplied. You heard how the defeat of the Armada raised the courage of the English. You have heard how more vessels were fitted out, in which adventurers attacked and conquered fleets of Spanish galleons. Thus England was raised from a second-rate to be a first-rate power, and her dominion over the seas was perfected in one reign.

The *commerce* of England also increased in this reign. Hitherto the wool, cloth, lead, and tin of England had been exported principally in German vessels belonging to the *Hanse Towns*—an important league of commercial cities in Northern Germany; now English vessels were substituted for this trade. The cod-fishery of Newfoundland was begun in this reign, and the important whale fisheries of the north were begun in Spitzbergen; so also, unfortunately, was the cruel commerce of the slave-trade in Africa.

The *religious persecutions abroad* were also of good account to this country. They caused a great number of the best workmen of the Netherlands to flee hither for refuge. Weavers, dyers, cloth-dressers, and silk-throwers settled in vast numbers, and greatly improved the *manufactures* of England. We will talk of some of the new inventions in our next lesson.

The love of *enterprise* was another new source of prosperity. The English looked on at the

new discoveries made by the Spaniards and Portuguese, and their emulation was aroused. Men of all ranks continued to fit out enterprises for discovering unknown lands. These were commanded by the renowned seamen Drake, Frobisher, Raleigh, and others. Sir Walter Raleigh discovered a part of America, which he colonized, and called *Virginia* in honour of the Queen. He also imported the tobacco-plant. In this reign the colonies of North America were commenced.

Besides planting new colonies abroad, provision was made for all who were unemployed at home. At this time the celebrated *Act for the relief of the poor* was passed. By this the idle were compelled to work, and all pretext for vagrancy was taken away. Before, the country had been overrun by robbers and thieves, but the evil was thus lessened.

The love of *learning*, and the number of learned men, added greatly to the glory of Elizabeth's reign. Herself learned, she was surrounded by men of similar attainments, some of whom were both "wise and good." Besides her tutor, ROGER ASCHAM, and LORD BURLEIGH, who have been mentioned, there was the wondrous poet SHAKESPEARE, the poet SPENSER, the dramatic writers BEN JONSON, BEAUMONT and FLETCHER; the scholar, soldier, and statesman, SIR PHILIP SYDNEY; and SIR WALTER RALEIGH. The great reformers CALVIN and JOHN KNOX, the famous divine HOOKER, and FOX, the author

of "The Book of Martyrs," also lived in these times.

The celebrated Scotchmen, the ADMIRABLE CHIRICHTON and BUCHANAN; the great merchant Sir THOMAS GRESHAM; the Admirals HAWKINS, FROBISHER, and DRAKE, were all men of great renown; while in foreign countries there lived the famous GALILEO, KEPLER,

TYCHO BRAHE, GESNER, TITIAN, CAMOENS, and TASSO.

But no more. You have had a very long lesson to-day. You have seen how, as it is well said, the whole nation roused itself from long habits of barbarity; so that arts, commerce, and legislation began to acquire new strength every day.

LITTLE LUCY.

FRIEND.

Do you grieve to lie on your lonely bed,
When the sun is so brightly shining?
The merry birds carol above your head,
Yet I hear not a word of repining.

LUCY.

Oh, no! though I suffer, and great is my pain,
Yet I read with much comfort and pleasure;
With much to enjoy, why should I complain,
When a book is to me a rich treasure?

For me, too, the fairest fruits and flowers
Are selected by fond friends' affection.
I love the bright sun—the cooling showers—
And thank God for his care and protection.

Brother picks the nuts from their dark brown coat,
The ripe peaches and pears from the tree;
Here, on my couch, from their pleasures remote,
I rejoice in their kindness for me.

When I hear below, in the busy street,
Companions joyful to school repairing,
There's music to me in their moving feet,
Rosy health sweet contentment declaring.

FRIEND.

God tempers the wind to the lamb that is shorn,
And meteth thy strength to thy trial.
You have his precious word:—no outcast forlorn;
Ask his grace, and ne'er fear a denial.

M. M. B.

RECAPITULATION.

P. We will have a few more questions on the old lessons.

44. Mention the different numbers. 45. The different persons. 46. The different cases.

47. Give me a sentence with the word "Thomas" in the singular number;—with Thomas in the plural number.

48. Make three more sentences, with Thomas in the first person—in the second person—in the third person.

49. Make a sentence with Thomas in the nominative case—another with Thomas in the possessive—another in the objective case.

50. Give me the following nouns in the plural number: dog, box, lady, wife, ox, child, woman, goose, sheep, deer, France, the sun.

51. Change the gender of the words bull, boy, man, uncle, he-goat, cock-sparrow.

52. Can you change the gender of these words—box, bird, person, table, animal? Why not?

53. Sometimes you form the degrees of comparison by adding *er* and *est* to the positive degree. Why do you compare the adjective *long* in that manner? Why the adjective *weak*?

54. Do you compare *red* exactly in the same way?

55. Why do you double the last consonant?

56. Compare *merry* and *gay*; give the rule concerning each.

57. Compare *wise*, *little*, and *beautiful*, and say the rule concerning each.

58. What do you call the numbers *one*, *two*, *three*, &c.? Can you compare them?

59. What is the difference between a relative and a personal pronoun?

60. Mention the relative pronoun. When do you use *which*? When do you use *who*? When *that*?

61. What do you call the word that precedes the relative?

62. What word is used both as antecedent and relative?

63. The pronouns *this* and *that* are used to point out a particular noun. What are they therefore called?

64. Give me the plurals of *this* and *that*.

65. What sort of a pronoun is *every*?

66. What sort of a pronoun is *who* when used to ask a question?

67. What sort of a pronoun is *all*?

68. Why are all these pronouns sometimes called "Adjective Pronouns"?

69. When you see a word added to a verb to tell you something about the action, such as "I sing *well*," what do you call this word?

70. Give me an adverb of time. 71. An adverb of place.

72. An adverb of manner. 73. An adverb of quantity. 74. An adverb of number.

75. An adverb of affirmation—another of negation.

76. "I will sing *by-and-by*"; what do you call "*by-and-by*"?

THE FOREIGN TRAVELLER.

ITALY.

"MY DEAR CHILDREN,—

"I hope to finish our lesson on Italy to-day.

"CHARACTER OF THE PEOPLE.

"Look at your map, and you may see three countries—*Italy*, *Spain*, and *France*. The inhabitants of these countries are all much alike. They all have dark hair, dark complexions, high narrow foreheads; nearly all wear the moustache or beard.

"But they are much alike in their *disposition* as well as their appearance. Most of them are 'excitable' people. They have strong passions; they soon become angry, or sorry, or glad, as children do. They are alike, too, in their *religion*, for all but a very few are Roman Catholics. This is partly because they are alike in their tastes. I told you that the Italians are fond of music, and painting, and singing, and dancing; so also are the Spaniards and French. So we find that in their religion there is much pomp and show. Music and singing, paintings, pictures, and statues, all form part of their religious ceremonies.

"Then these nations consist principally of the '*Celtic*' races of man; they are not, however, exactly alike. The French are said to be volatile and gay; the Spaniards more solemn and grave; while the Italians are more passionate and vindictive.

"The Italian painters have been very famous men. From Italy sprang Leonardo da Vinci, Raphael, Titian, Corregio, Michael Angelo, Paolo Veronese, the Caracci, Guido, Spagnoletti, Salvator Rosa, Canaletta, and many others.

"EDUCATION.

"You may be thankful that you are not an Italian child; for although Italy has produced good poets, painters, and singers, the *people* have very little education; most of the poor have no education at all, or it is of so wretched a kind that it is hardly worth the name. Nearly all the schools are conducted by priests and Jesuits. These men do not like that the people should learn too much. If they find a child who is very clever, they will, perhaps, take pains with him that he may become a priest also. In the higher schools and colleges most of the professors are priests. In many parts the people may not read any book they choose, but only such as the priests permit. In the villages scarcely one can write or read at all. Thus are the people kept in ignorance by their bad teachers.

"I think, therefore, that you would not like to be an Italian child, for you would then grow up to be as unhappy as the Italians are.

"GOVERNMENT."

"Where a nation has not good education it will not be likely to have good government. The Italians have been kept in ignorance by their priests, so also they have been *enslaved* by them. The Pope and kings, the priests and the nobles of Italy, have for a long time governed the people as though they were slaves. Instead of forming one large nation, the people of Italy have been divided, and governed by foreign monarchs.

"You remember how, in a former lesson, we learned of the different kinds of government,—of the absolute monarchy, the limited monarchy, and the republic. The kings who have divided Italy, and who oppress the people, are absolute monarchs. They can make what taxes they please, so that if any branch of commerce flourish, they can ruin it by making the merchants pay heavy duty. If the people give attention to agriculture, and get profit from the soil, the 'nobles' who own the land make the cultivators pay a heavy rent, and then take the profit to themselves. If other men give attention to learning and science, then the priests can prohibit them from reading any books except those chosen by themselves. Thus *commerce* or *manufactures* may be crushed by the king; *agriculture* by the nobles and owners of the land; and *learning* and *science* by the priests. How much may a people's happiness

depend upon their governments!

"Such *has been* the state of Italy for a long time. At present the people of Italy groan under most cruel taxes, oppressions, and all kinds of injustice from their rulers. They long to be united into one kingdom, and many long to form a republic and govern themselves. But nations like the Italians, Spanish, and French, are, as I told you, very "excitable"; they soon change their opinions. The Italians, therefore, are not a fit people to form a republic; they would soon quarrel among themselves, as the Spanish and French people have done.

"The fall of Napoleon Bonaparte was a source of joy to most of the nations of Europe, but it was a great sorrow to the Italians. When Napoleon was master of Italy, he knew what the country required. By his control everything was changed. The people were united under one government, and new life and joy were awakened. When Napoleon fell, Italy was again divided and oppressed by its old masters. Napoleon prophesied that this beautiful but unfortunate country would one day be united again. Every one who wishes well for Italy hopes that this prophecy may be fulfilled, and that the people may flourish in peace under the government of a limited monarchy.

"I am sure, dear children, that I did not intend to give you so long an account of

Italy. I shall, however, give you only a short memory lesson to learn.

"Your affectionate friend,
"Uncle Richard."

Notes—EUROPE.

ITALY.

(Position.) — ITALY is the middle peninsula of the three at the south of Europe. It is bounded on the north by the ALPS, on the east by the GULF OF VENICE, and on the south and west by the MEDITERRANEAN SEA.

(Soil, &c.) — ITALY, because of its position, has a fine soil and climate. It therefore produces abundant and rich fruits, such as grapes, oranges, lemons, citrons, melons, olives, mulberries, chestnuts, &c., and it is called "The Garden of Europe." Italy has a range of mountains extend-

ing the whole length through the centre. Its principal rivers, the Po, the Adige, and the Tiber, are, however, unimportant.

(Divisions.) — The three principal divisions of Italy are Austrian Italy at the north, the kingdom of the Pope in the middle, and the kingdom of Naples (sometimes called the Two Sicilies) at the south. It is also subdivided into nine independent states.

(Towns.) — The principal towns are VENICE, GENOA, and PISA, formerly the greatest commercial cities in the world, BOLOGNA, TURIN, MILAN, MANTUA, PADUA, LEGHORN, FLORENCE, ROME, and NAPLES.

(People.) — The people of Italy, like other Celtic nations, are excitable and passionate. They delight in music, poetry, painting, &c., but they are badly educated and badly governed.

O SAY, BUSY BEE.

O say, busy bee, whither now are you going,
Whither now are you going—to work, or to play?
"I am bound to the garden, where roses are blowing,
For I must be making sweet honey to-day.
Sweet honey—sweet honey—
For I must be making sweet honey to-day."

O say, pretty dove, whither now are you flying.
Whither now are you flying, to London or Rome?
"I am bound to my nest where my partner is sighing,
And wait'g for me in my snug little home.
Little home—little home—
And waiting for me in my snug little home."

So we, all so happy, while daily advancing
In wisdom and knowledge, in virtue and love,
Will sing on our way, in our progress rejoicing,
As brisk as the bee, and as true as the dove.
Will sing—will sing—
As brisk as the bee, and as true as the dove.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

21st Week.

MONDAY. Moral Biography.

INDUSTRY.

BENJAMIN FRANKLIN, THE PRINTER.

P. You heard how industrious Franklin was as an apprentice. Let us hear how he grew up to be a man.

More than four hundred miles from Boston, where Franklin was born, there is a town called PHILADELPHIA. In the year 1723 you might have seen a boat stopping at this town with some passengers. One of these was a poor hungry-looking boy in his working dress. He was covered with dirt; his pockets were filled with shirts and stockings; he did not know a soul in the place, nor where to seek a lodging. He was very tired too; he had been walking and rowing for a long time, and he had had no sleep the night before.

Ion. Then I think he *must* have been tired—I should have been.

P. All the money in his pocket was a Dutch dollar, and about a shilling's worth of coppers.

The poor boy gave the boatmen who had rowed him to Philadelphia the shilling's worth of coppers, and then walked up the street. What do you think he would do first?

W. I think he would get something to eat.

P. Yes; he looked about eagerly for a baker's shop. When he reached the Market Street he met a child carrying a loaf; and he asked it, "Where did you buy that bread?" The child pointed out the baker's shop, so he went there and asked for some biscuits, such as he used to eat at Boston. The woman told him that she had not any; then he asked for a threepenny loaf.

"We do not keep threepenny loaves," said the woman.

"Then," he said, "please give me three penny-worth of bread of some kind or other."

The woman gave him three penny rolls. He looked much surprised to see that they were so large; but he put one roll under each arm, and began to eat the third, continuing his walk up the street, while the people wondered at his odd appearance. He walked on until he reached the river side, where he took a draught of water with his bread; then, feeling that the one roll was as much as he could eat, he gave the other two to a woman and her child who had been passengers with him in the boat.

The boy next went back to

the street, and seeing a number of well-dressed people going to the Quakers' meeting-house, he followed them, entered the place, and fell into a sound sleep; from which he did not awake until the meeting was over, and the assembly had gone away. Then one of the congregation was good enough to wake him.

Ion. How tired he must have been! Was that boy Franklin, papa?

P. Yes. Let us see how he came to be so far away from home. After some years of his apprenticeship had passed away, his brother, who was, you may remember, his master, was put in prison on account of an article which had been printed in his newspaper. When he was set free the authorities prohibited him from ever printing it again; and as, during his confinement, Benjamin had managed the paper with great spirit, his brother could only continue it by allowing it to be published in his name. His indentures of apprenticeship were then given up to him. Some time afterwards his brother, who was a passionate man, struck him. Franklin was very angry, and knowing that his brother could not detain him, now that his indentures were given up, he took advantage of the circumstance, and left him.

This action was not quite fair on Benjamin's part; his brother, therefore, went to all the other printers in Boston, persuading them not to give him any work, and Benjamin was thus compelled to leave his native town. He secretly sailed

for New York, without the consent of his parents, and there he could not find any employment, but was recommended to a printer in Philadelphia.

W. I do not think it was right of him to leave Boston without letting his father know.

P. No. Franklin himself was afterwards sorry for what he had done; he says that this act was one of the *errors* of his life. However, here he was in Philadelphia. After he had awoke from his sleep, and had left the Quakers' meeting-house, he found a lodging for the night. The next morning he proceeded to call on the printer to whom he had been sent for work.

Can you not imagine his thoughts as he went forth in the strange city? Ah, I know how he would feel! He would say to himself, "Here I am all alone—no one knows me here—nobody speaks to me—I am not very happy, for I am not sure that I have done right I am very poor too—I may not get work—I may have to beg."

"Look," he would say to himself, "look at these strange people passing up and down—how cheerful that man looks—he has a comfortable home—he is respectable and happy."

"Well," he would say again, "so may I be. No, I will not beg! I can work—I can think—I can read and can write—I can rise up early and go to bed late—I am industrious! Who says I may have to beg?" Then he would reproach himself for having had such a thought—"No, I will never beg—I have

become very poor, and have fallen down, but I can get up again. I will rise in the world!" Then he would make haste to the printer.

MR. BRADFORD, *Printer, Philadelphia*, was the direction, and soon Benjamin Franklin had found the house. But here he was disappointed; there was no work for him! Mr. Bradford said, however, that there was a man named Keimer, who might perhaps find him employment.

Again Benjamin Franklin went forth; but again he was disappointed. Mr. Keimer had no work for him. Mr. Keimer had not even a knowledge of the business; he had only a printing press, which was quite out of order. This gave Franklin some hope: he said if there was no work he could make some; and after considering a while, Keimer said to him, "You may see if you can put the old press to rights."

Franklin would not wait to be told twice; he set to work immediately, and before long the press was mended. In a few days he found that there was printing to be done. His master could not afford to pay him much wages, but he did not mind that. A man who can dine on a dry biscuit, and enjoy dry bread and cold water, cannot be brought into trouble by having little money—a very little money could satisfy Franklin; he carried his riches about with him, in his mind; his great luxuries were his own thoughts. He did not need half as much money as any one else would want to make him rich.

W. No; I can understand that. Suppose some other person had a sixpence. He might spend 1d. for beer, and 4d. for meat, and 1d. for bread, for his dinner; but Franklin would get two penny rolls, and some water from the river, and would save the other 4d.

L. He did not want so much—that is the secret.

P. True; it is a very old piece of wisdom—that he is the richest man who has the fewest wants. Do you remember the story of Alexander the Great?

L. Yes; he had made himself master of all the world, and then he was in trouble: he was poor because he wanted another world to conquer, and had not got it. And then, Diogenes—

P. Yes; but we are running away from Franklin. He worked well at Mr. Keimer's, so his work soon increased; he was therefore able to take respectable lodgings. He was even beginning to save money, when he met with a very tempting offer of employment.

One of Franklin's letters had by chance fallen under the eye of Sir William Keith, the governor of the province. Sir William was so struck with the good penmanship, and the style of composition, that he inquired who wrote it. When told, the governor said that Franklin must be a promising young man, and that he would give him some profitable work to do. One day, therefore, while he and his master, Keimer, were at work in the office, they were astonished to see the governor and another finely-dressed gentle-

man knocking at their door. The governor asked for Franklin, and, after some conversation, said that he intended to establish a printing-house, and promised that Franklin should have the printing of the public papers for both governments.

This was indeed good news for Franklin ; he had never dreamt of "getting up" in the world so suddenly as this. But he thought, "I do not know whether my father will lend me the money to begin business with." The governor, however, said that Franklin should return to Boston ; and he gave him a letter to his father, in which he set forth all the advantages which his son would gain by the scheme, and urged him to lend his son the required money.

Franklin set out for home with a joyful heart, for the governor for some time before he went had treated him with great kindness ; he had frequently invited him to dinner, and was familiar and friendly towards him ; the lad was, therefore, proud of these honours. When he reached Boston his father and brothers were very glad to see him. He had been away seven months ; during all that time they had not heard of him, nor did they know where he was ; and now he had come back, dressed in a new suit of clothes, with a silver watch,

and five pounds sterling ! His father, too, wondered exceedingly at his story, and the contents of the letter. He considered the question for a long time ; he turned the matter over and over again in his mind, and at last he refused to lend his son the money. He said that he was only eighteen years old, and was too young to manage such a large business ; but that he should have some money when he should reach the age of one-and-twenty.

Franklin was therefore obliged to return to Philadelphia without success. Sir William Keith, however, did not say that the project should be given up. He kindly said to Franklin, "Since your father will not lend you the money, I will do it myself. I will advance you a hundred pounds." It was soon after arranged that Franklin should go to England to buy type and presses, and all that was wanted for the establishment. Accordingly he set sail for London in the next packet-ship, taking with him the governor's letter of credit for £100, and recommendations to many gentlemen of influence.

This was a great change for Franklin. How different were his thoughts now from those of his first morning in Philadelphia ! He would say to himself, "I have risen now !"

THE WORLD'S WEALTH.

The swelling of an outward fortune can
Create a prosp'rous, not a happy man ;
A peaceful Conscience is the true Content,
And Wealth is but her golden ornament.—QUARLES.

THE DOG.

"*He will not come,*" said the gentle child,
And she patted the poor dog's head,
And she pleasantly call'd him and fondly smil'd;
But he heeded her not, in his anguish wild,
Nor arose from his lowly bed.

'Twas his master's grave where he chose to rest,
He guarded it night and day;
The love that glowed in his grateful breast,
For the friend who had fed, controlled, carest,
Might never fade away.

And when the long grass rustled near
Beneath some hasting tread,
He started up with a quivering ear,
For he thought 'twas the step of his master dear,
Returning from the dead.

But sometimes, when a storm drew nigh,
And the clouds were dark and fleet,
He tore the turf with a mournful cry,
As if he would force his way, or die,
To his much-loved master's feet.

So there through the summer's heat he lay,
Till autumn nights grew bleak,
Till his eye grew dim with his hope's decay,
And he pined, and pined, and wasted away,
A skeleton gaunt and weak.

And oft the pitying children brought
Their offerings of meat and bread.
And to coax him away to their homes they sought;
But his buried master he ne'er forgot,
Nor strayed from his lonely bed.

Cold winter came with an angry sway,
And the snow lay deep and sore,
Then his moaning grew fainter day by day,
Till close where the broken tombstone lay
He fell, to rise no more.

And when he struggled with mortal pain,
And Death was by his side,
With one loud cry that shook the plain,
He called for his master,—but all in vain,
Then stretched himself and died.

THE TIMES OF QUEEN ELIZABETH.

W. If you please, papa, we want to know more about the great men who lived in Queen Elizabeth's reign, and you said we should hear of the new inventions.

P. It would take a long time to give you the history of the great men; I can only mention a few particulars.

SIR WALTER SPENSER is known as the best dramatic writer that ever lived; he wrote 35 plays; and was born at Stratford-on-Avon.

W. And who was Mr. Spenser?

EDMUND SPENSER, the poet, was the author of "The Fairy Queen." An Irish mob set fire to his house in Cork, and part of his beautiful poem was destroyed. Spenser died soon after, being broken-hearted, and almost a beggar.

Ton. And what made Sir Philip Sydney celebrated?

P. I said that he was a celebrated scholar. His poem "Arcadia" was very popular. He was not only accomplished but amiable. In a battle in the Netherlands he was mortally wounded, and his servants brought him some water to quench his thirst. As he was raising the bottle to his lips, he saw beside him a common soldier who was dying, and was perhaps looking with longing eyes at the draught. Sir Philip could not bear this; although he needed the water himself, he instantly handed it to the poor man, saying, "Poor

fellow, thy necessity is greater than mine." A few minutes after he himself died.

L. And was Sir Thomas Gresham, the merchant, a good man?

P. Yes; and a good merchant too. He built at his own expense the Royal Exchange, and founded Gresham College. Her Majesty dined with him at the Royal Exchange, and he was called the Queen's merchant, because he had the management of her money transactions. The ADMIRABLE CRICHTON is said to have been a most wonderful man. He excelled as an orator, poet, philosopher, boxer, fencer, gladiator, scholar, courtier, and soldier.

The INVENTIONS in Queen Elizabeth's reign are worth noticing. *Watches* for the pocket were first introduced from Germany: one was presented to the Queen. Furs and muffs also were first worn; and carrings were brought from France. In the year 1601, however, a bill was brought into Parliament to prevent riding in coaches; for it was said that it rendered the gentlemen effeminate; but the bill was dropped. *Whalebone* was introduced from the whale fisheries, and sail-cloth was first made for the use of the navy.

The first *newspapers* were printed in this reign, to inform the people of the defeat of the

Spanish Armada; but they did not come into general use then. Two of the *stops* used in writing were invented; namely, the colon (:) and the semi-colon (;). The first *paper-mill* was established at Dartford in Kent by a German. *Alum* was discovered in England; it had hitherto been a monopoly belonging to Rome. This article is useful to the dyer, the candle-maker, and the merchant. *Peaches* were first brought into England from Persia; *tulips* from Holland; *laurels* and the *horse-chestnut* tree from the Levant. *Asparagus*, *artichokes*, and *cauliflowers*, were also introduced.

The *stocking-frame* was another useful invention of this reign. It was invented by the Rev. William Lee. He began to use it for weaving stockings at a village near Nottingham, but the stocking *knitters* were jealous; they feared he would ruin their trade, and they drove him away. He fled to France, where he was treated quite as badly, and he soon died of a broken heart in the greatest poverty. Nottingham is still the head-quarters of the stocking trade.

Needles first came into use in Elizabeth's reign. They had been invented in the reign of Edward II., but none knew how to make them except the inventor, who died. Grouse, a German, revived the art, and carried on a trade at Buckingham, where there is still a large manufactory. In the early part of this reign *copper money* was first brought into use.

Such were the principal inventions and improvements of Elizabeth's reign. The subject of the *COSTUME* of these times is a rather interesting one. Its great peculiarity was the enormous ruff worn round the neck. This ruff gave great offence to the strict Puritans, who thought the love of all finery a sin. One of their writers makes a furious attack upon it, and speaks of it as "*clogged and pestered* with needlework." He says, that the lords of the Court were very choice about their *shirts*. These were made of cambric, with open work down the seams; so that they often cost ten pounds each, which, he adds, "is horrible to think of." The Queen herself thought that her subjects were beginning to wear their ruffs too large; for it is said that certain grave persons were appointed to stand at the gates of the City and cut down every ruff that was more than a yard in depth. A proclamation was also issued against wearing gold chains, and cloaks which sometimes reached down to the men's heels. The length of their swords was limited to three feet.

The *AMUSEMENTS* of those times were not of the most refined character; bull and bear baiting, the baiting of apes, cock-fighting, cards and dice, quoits, racket, nine-holes, and leaping hedges and ditches, were matters in which both gentlemen and *ladies* took an interest. Even the Queen enjoyed such sports, and was fond of noisy entertainments. During her meals she listened

to "twelve trumpets and two kettle-drums, which, together with fifes, cornets, and side-drums, made the hall ring for half an hour together." The old sports of hunting and hawking, with pageant and show, were the chief diversions of the higher ranks. Theatres were also getting much into vogue; and their entertainments were much improved by the plays of "Will Shakespeare." For some time plays were acted on Sundays only; after 1579 they were acted on Sundays and week-days also. The theatres were from the beginning stoutly opposed by the Puritans. In the very early times only religious pieces, "mysteries and moralities founded on the Scriptures," were acted.

You have now heard something of the manners and customs of the people in Elizabeth's reign. We have talked of the great men, the inventions, new articles of commerce, the dress, and the amusements of the people; suppose that you next write the lesson.

Lesson 34. ELIZABETH.

Began to reign . . . 1558.

Died 1603.

1. QUEEN ELIZABETH was the second daughter of Henry VIII. by his second wife, Anne Boleyn. She began her reign by applying herself to the settlement of the national religion. Being aided by wise and prudent counsellors, the great work was accomplished which rendered her reign glorious.

2. The imprisonment and execution of her cousin, MARY QUEEN OF SCOTS, was a less

pleasing event. Elizabeth was led to commit this cruel act by her jealousy, and fear lest the Roman Catholics should place Mary on the throne in her stead. The punishment was also inflicted because Mary took part in one of the many conspiracies which had been formed against the Queen's life.

3. The conquest of the SPANISH ARMADA was another great incident. By this conquest the hopes of the Papists, who had expected to crush the power of the Protestants at one blow, were defeated.

4. The conquest of the Spaniards also gave rise to a high feeling of courage in the English. This led to the increase of their navy, and the establishment of their superiority on the seas. Thus the power of the kingdom was much increased. Enterprise and commerce also flourished.

5. On the whole, this reign is remarkable for (1.) The establishment of the Protestant religion; (2.) The increase of the naval power; (3.) The increase of commerce and enterprise; (4.) The improvement of manufactures and inventions; (5.) The number of learned and brave men, so that the time of Queen Elizabeth was styled "the Augustan age of England."

On the other hand, evil as well as good was begun: (6.) The establishment of the slave-trade; (7.) of many monopolies; and (8.) the religious persecutions were all sources of mischief; while Elizabeth's exercise of unjust power was the beginning of an evil which led in another reign to a most dreadful catastrophe.

THE ENGLISH TRAVELLER.

LONDON—THE NORTHERN SUBURBS.

"**MR DEAR CHILDREN,—**

"We saw most of the modern buildings of London, as you heard in my last letter; but it was very hard work to visit so many places in one day.

"On the fifth day we went to the **GREAT EXHIBITION**; but if you suppose I am going to talk of what we saw there, you are mistaken. My friend and I were so tired when we reached home, that we were too glad to sit still. I found that to give you any idea of the Palace, the crowds of visitors, or the wonderful sights, would cost me many hours of labour; 'besides,' I thought, 'you must have heard all about the Exhibition by this time.' And then again I remembered that the next day we were to visit the suburbs of London, when we should have a great deal to do. So I proposed that we should go to bed at once, and have a good night's rest. And we did so.

"The next morning my friend knocked at my bedroom door before it was light. It was only five o'clock, but he placed a candle and some warm water outside my door, and told me to make haste. When we were ready we each ate a crust of bread, so that we might not go out 'on an empty stomach,' and then slipped quietly out at the door.

"'Now,' said my friend, as we stood in the cold street, in the damp grey fog, 'which way

will you go? North, south, east, or west?'

"'Suppose we begin with the north,' I replied.

"'Very well. Then take the first turning to the right.'

"'How quiet all the streets are!' I remarked. 'They appear so strange; for all the shop windows, and the private windows also, are shut up. The pavement, too, and the roads, are quite empty, except—look, what is that object in the distance?' On getting nearer to it, we found it was a cart nearly filled with mud, which some men had swept off the roads. 'These scavengers,' said my friend, 'are obliged to be up early, that the roads may be cleaned before the bustle begins.'

"'Who pays them for cleaning the streets?'

"'Their master, the contractor. The mud of London is sold to a contractor. He finds it worth while to pay for permission to clean the streets, and to cart away the mud. But here comes some one else. Did I not mention the *qualities* of the London mud before?'

"'Ah, that poor man looks very tired,' I said, as a stranger passed us; 'he seems as if he has not been to bed yet.'

"'Yes,' said my friend, 'he goes to bed earlier than this only once a week; he is a printer. He has been at work all night preparing the newspaper which will be ready for us to read in

about an hour's time. But here are two more people coming; the streets will begin to fill soon.'

"The first man of these two was a policeman, walking on his 'beat'; the second was the lamplighter, putting out the lamps; we next overtook three milkwomen, who were making a great noise with their Welsh language, and the empty cans which they were carrying somewhere to be filled. The next people who passed us were a man and a boy, with black sooty clothes and faces; they were sweeps, going to rouse up some poor sleepy servant: then we met some bricklayers, who were going to their work. We found, too, that the roads were not quite empty; a noisy butcher's cart overtook us, in which were two butchers driving towards Newgate market.

"These men," said my friend, "are obliged to be at market very early, for they have to bring back their meat, and hang it in their shops by eight o'clock, or half-past. They are like the milkmen, and all who have to provide articles of food; we shall see others soon. Here comes a cab—see, it has trunks upon it; somebody is going off by the early train. Here are some more provision merchants: these men with their baskets and barrows are costermongers; they are going to buy some vegetables, or cherries, or other fruit, so as to earn their day's bread. Here is one coming back from market already. What a quantity of flowers in pots he has in his basket! He will change them for old clothes before the day is

over. Here comes a girl with some moss-roses and other flowers, which she will sell at a half-penny or a penny a bunch; and here are two boys with baskets of water-cresses; they will sell all of them, perhaps, before eight o'clock. Here is something else on the road; it is an immense waggon-load of cabbages going to Covent Garden Market; they are very late, they ought to have been there by four o'clock in the morning. And here, too, come two oxen and some sheep; they have been sold in Smithfield already this morning, and are now being driven home to the butcher's."

"But you see it is getting later," I said; "there are many more people stirring. Here come a man and a boy bringing several things. See! they have a table or stand of some kind; the man has a great tin boiler or kettle, and the boy has some cups and saucers and a stool."

"Yes; they have been keeping a *night-coffee-stall*. They sell coffee from a very early hour until about half-past six or seven; and during all the night they find plenty of customers—the cabmen—and policemen, perhaps—the cattle-drovers: these fish-women, who are coming from Billingsgate with their load of fish, I dare say they had a little coffee on their way. See how many more people there are now; it is just seven o'clock. The lamplighters have put out all the lights; here is a row of policemen, who are coming home from their night-duty; here are some carpenters going to work. The pub-

lic-houses are opening. These two boys are errand-boys, I dare say ; they are going to take down the shutters of their masters' shops. See how the coffee-houses are opened; here is one marked "Early breakfast-house." This eel-pie house has been open for some time; there are many coffee-houses and eel-pie houses which, like the coffee-stalls, are kept open all night. See how the servant maids of the private houses are opening the shutters, and beating the matts; some are cleaning the door-steps, others are sweeping the pavement, and here is a very clean servant, washing the pavement in front of her house with a pail of water. This great basket of ashes at the edge of the pavement is for the dustman, and here is the dustman's cart itself.

"See! the sweeps are going home with their bags of soot; the milkmen and milkwomen are singing out "*Below*"; and some are letting down little cans of milk in the areas of those houses where the servants will not get up. There is an early postman going for his letters; we shall see a newspaper-boy very soon; there are many cabs and carts about now, you see, and the shops are nearly all open. Look into this stable-yard: here are two men washing an omnibus, and others bringing out the horses; this is the early omnibus which takes the busy City gentlemen to town by half-past eight."

"Where are we now?" I said.

"We are in *Exmouth Street*, CLERKENWELL. We are getting

near the ANGEL, ISLINGTON, which is the beginning of the great *northern* suburbs; but let us go into these coffee-rooms: and get some breakfast."

"But it is not a respectable place; let us go to an hotel."

"Don't you pretend to be so genteel, friend. The coffee-room is not the less respectable because the charge for your breakfast is so little. If you can't eat the breakfast which you will get in these nice rooms, you may go without." So we entered.

"What will you take, sir?" said the waitress to us as we chose a table for ourselves.

"I should like some coffee," I said, "and a roll and an egg. Do you sell eggs?"

"Yes, sir; but the rolls will not be in until eight o'clock."

"Then I'll wait," I replied. "I'll take the same," said my friend; "only bring me a rasher of bacon instead of an egg. That is a curious rule of the bakers," he whispered to me; "they will not let us have any rolls in London before eight o'clock—at least, none of the bakers that I know will."

"Then that's a shame," I cried out.

"Hush!" he said, "you must not speak out loud in a coffee-room. Do you not notice that the other gentlemen are reading? Here is to-day's paper; perhaps the one which the printer we met had been preparing. Here is yesterday's *Times*. Here are "*Chambers's Journal*," "*Bleak House*," and all kinds of Magazines. You do not pay anything for reading

them—the food for your mind is given in with the food for your body. You see that here is a library of amusing books besides.'

"The waitress soon brought us our breakfast; each had his own tray, covered with a snowy white cloth. I certainly enjoyed my meal very much; and when I paid for it, I found that it cost very little. The charge for the coffee was 1½d., for the hot buttered roll 2d., for the egg 1½d.; total, 5d. To this, as my friend directed me, I added 1d. for the waitress, to help her to pay for the newspapers and periodicals which she had lent us to read. 'You are not obliged to pay that penny,' he added, 'but it is always right to do so.'

"'Now,' said my friend, when we were again in the open air, 'we will not go direct to the Angel. I can show you some places worthy of note before we reach there. Let us go back a little way. Here is a well-known building, called the MIDDLESEX HOUSE OF CORRECTION. The premises are very large; and it is here that the criminals of Middlesex are sent to be punished. It contains about 350 cells, and about 1,000 prisoners on an average—that is a sad number. There is a trend-mill inside, and there are workshops in which the prisoners are employed.'

"'But let us go onward again to Islington. Here, in Exmouth Street, is a large building, which was once a theatre; but the Countess of Huntingdon bought it, and transformed it into a chapel.'

"We went on further, and reached a building called SAD-

LER'S WELLS THEATRE. 'Sadler's Wells,' said my friend, 'was begun in this way: A Mr Sadler discovered a mineral spring here in the year 1683. He then caused certain wells to be made, which were therefore called *Sadler's Wells*; and as they became famous, and were frequented by much company, he built a music-house to divert his customers, which at length became a *theatre*'

"'We are very near the Angel now, but we will turn in another direction. Near here is MYNDELTON SQUARE, called after the Sir Hugh who, you remember, made the New River. In the same neighbourhood is the NEW RIVER HEAD.'

"'What is that?' I said.

"'An immense reservoir; come and see it. Now see what an immense sheet of water it is; from this place an enormous quantity of water is supplied to the Londoners. But let us pass on to the Angel.'

"'Here is PENTONVILLE. This neighbourhood is so called after Mr. Henry Penton, who began to build residences here in 1773. This part of Pentonville is called the BARNSBURY ROAD; it is so called after *Lady Berners*, who had a manor in the neighbourhood.'

"'So that Barnsbury means "Bernersbury,"' I said.

"'Yes. In this neighbourhood are the MODEL PRISON and the CALDONIAN ASYLUM, which are fine buildings.'

"But I have reached the bottom of my paper.

"Your affectionate friend,
HENRY YOUNG."

ETYMOLOGY.

CHAPTER III.

THE DIFFERENT KINDS OF VERBS.

P. To-day we will begin our second lesson on the Verbs; and I warn you, Willie, that it will be a very long one.

W. Why will it be long, papa?

P. Because there are so many kinds of verbs. And then each verb is divided into so many parts. And again, these have such different inflections. And what is worse than all—

Ion. What is that?

P. Oh, nothing very bad! But different verbs are often joined together to make new verbs; and thus a great variety is formed.

L. I should call such verbs "Compound Verbs." We have had several compound verbs in our parsing exercises. You *shall be sent*. I *have taken*. I suppose that the other verbs, such as *I said*, *I take*, are "Simple Verbs."

P. Yes; that is the case. Thus you have simple and compound verbs to begin with.

Ion. We meet with simple and compound kinds in almost everything. In our Botany Lessons we have simple and compound peduncles, simple and compound leaves, a simple and compound corolla, simple and compound pistils.

P. True. The words simple and compound are very general terms. But in verbs the forms are very various. Thus we

have, *to sing*, *I sing*, *sang*, *sings*, *singing*, *sung*, *was singing*, *did sing*, *shall sing*, *have sung*, *had sung*, *shall have sung*, *may sing*, *may be singing*, *can sing*, *might sing*, *may have sung*, *could have sung*, *would have sung*, and so on. Therefore I give you warning once more, that we are going to undertake a difficult part of grammar; but it may all become easy if you will give to it patient and close attention.

We will begin to-day with the different kinds of verbs. Do you remember our first lesson on verbs?

W. Yes, papa. You said that the verbs are words which *declare a doing something*, such as "*I jump*"; and there are others which declare a *being something*, or that something is *being done*—such as, "*I am*," "*Tom is kicked*."

P. The first verb, "*I jump*," simply shows that the nominative is doing something. Because the nominative *acts*, we call "*I jump*" an ACTIVE VERB.

In the verb "*Tom is kicked*," the nominative does not act. Tom merely allows the action of kicking to be done to him. The kicking *passes on* to him. Thus we call "*is kicked*" a PASSIVE VERB.

Let us look at the next verb, "*I am*." Suppose you say, "*I am here*." Does "*I am*" show that you are doing something,

FRIDAY.

PLEASANT PAGES.

GRAMMAR.

or does it show that you are being done to?

L. It does not show either; it only expresses a being something. So "*I am*" is neither an active nor a passive verb.

P. And when a noun is neither of the masculine nor feminine gender, what word do we use to express neither?

Ion. *Neither*, papa. And I suppose that verbs which are neither active nor passive are called NEUTER VERBS.

P. They are. Thus we make three classes of verbs.

1. Verbs in which the nominative is *doing something* are called ACTIVE VERBS; such as, *I dance*.

2. Verbs in which the nominative is *being done to* are called PASSIVE VERBS; such as, *John is hurt*.

3. Verbs in which the nominative is *being something* are called NEUTER VERBS; such as, *I am good*.

W. Are there any other kinds of verbs beside the active, passive, and neuter, papa?

P. Yes, there are different kinds of active verbs. Tell me the difference between these two. *John jumped*; *John killed*.

W. They are both active; the only difference is, that the last one, *killed*, is not "sense" by itself, unless you say what he killed.

P. That is the difference I wanted you to observe. *To kill* is like a great many more verbs. It does not make "sense" unless you say whom the action is done to.

I said in a previous lesson, "Generally when an action is performed there are two parties

—some one to do it, and some one for it to be done to. Such as, *John killed the cat*. *Mary struck James*. *Mamma kissed Tetty*. *Jane saw an ox*."

L. But, papa, nothing was done to the ox when Jane saw it?

P. No; the ox was seen, certainly, but the action of seeing was not *done to* the cow, it merely *passed on* to it, as we say. So we call such a verb *transitive*, which means "passing across." We make the rule about such verbs in this way:

"All active verbs in which the action must *pass on* to some other thing are said to be "TRANSITIVE VERBS."

The rule concerning the other active verbs is very easy to understand. These verbs express actions which we may perform without doing them to others; such as, *I run*. When you run the action does not pass on to any one else. You cannot run anybody. You cannot say, "I run John."

Ion. Nor can you say, "I *laugh John*." Nor "I *cry John*," nor "I *sneeze John*," nor "I *swim John*." All those actions are done without their passing on to any one else.

P. So those active verbs are not "transitive," and we therefore call them "Intransitive verbs."

L. That makes two kinds of active verbs.

The *Transitive Active Verbs*; such as, *I touch him*.

The *Intransitive Active Verbs*; such as, *I fly*.

P. There is another kind of

verbs to be noticed yet. Sometimes the verb *to be* is used not by itself; like, I *am*, He *is*, but it forms part of a compound verb; thus, I *am* living, He *is* dancing. As these verbs help to make up that form of the verb, they are called "helping" or "auxiliary verbs" which means the same thing.

There are many auxiliary verbs; such as in the phrases, I *have* loved, I *will* love, I *can* love, I *may* love, I *do* love.

L. Thank you, papa. Now I will make a list of the Verbs.

There are several kinds of Verbs, viz.:—

The SIMPLE VERB, in which one word expresses an action; such as, I *stand*, I *fall*.

The COMPOUND VERB, in which two or more words express the action: such as, I *did stand*, I *was falling*.

The ACTIVE VERB *transitive*, where the action passes across to some other thing; such as, I *caught* John, I *bit* the bread.

The ACTIVE VERB *intransitive*, in which the action does not pass on to some other thing; such as, I *jump*, I *cry*.

The PASSIVE VERB, in which the nominative is acted upon; as, I *am caught*; I *was bitten*.

The NEUTER VERB, in which the nominative is simply being something (it is not acting nor being acted upon); such as, I *am*, I *sleep*, I *remain*.

The AUXILIARY VERBS are so called because they help to form compound verbs: as, I *shall fall*, I *will sing*, I *did shake*.

THE LITTLE SPRING.

BENEATH a green and mossy bank
There flows a clear andairy stream;
There the pert squirrel oft has drank,
And thought perhaps 'twas made for him.

Their pitchers there the labourers fill,
As drop by drop the crystnls flow,
Singing their silvery welcome still
To all who to the fountain go.

Then to the river on it glides,
Its tributary drop to bear;
Its modest heml a moment hides,
Then rises up and sparkles ther.

The touching lesson on my heart
Fills like the gentle dews of heaven,
Bids me with humble love impert
The little treasure God has given.

For from a source as small as this
Full many a cup of joy may flow,
And on the stream of human bliss
Its little ray of gladness throw.

MRS. FOLLEN.

WE MERRY MINSTRELS.—A ROUND.

PURCELL.

1 3 We mer - ry min - strels soft mu - sic en - joy, For
 2 3 We sing so blithe - ly, we drive a - way care, And
 3 3 Then hail, sweet sci - ence! hail, hail heav'n-ly sound! No
 1 2 mu - sic doth ma - lice and ha - tred de - stroy;
 1 3 with our soft har - mo - ny ban - ish de - spair.
 1 1 plea - sure like mu - sic on earth can be found.

GOOD NIGHT.—A ROUND.

1 3 Now to all a kind Good night.
 2 3 morn - ing light, to all Good night!
 3 3 night! Good night! Good night!
 1 2 Sweet - ly sleep till morn - ing light, till
 1 3 Sweet - ly sleep till morn - ing light. Good
 1 1 Good night! Good night! Good night!

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

22nd Week.

MONDAY. Moral Biography.

INDUSTRY.

BENJAMIN FRANKLIN, THE PRINTER.

P. BENJAMIN FRANKLIN travelled over the ATLANTIC OCEAN, and reached London. Before he landed, as soon as the ship arrived in the Thames, Franklin searched the letter-bag, but he found no letters for himself, nor any letter of credit for £100. The letters of recommendation proved worthless. The truth was, the governor, whom Franklin thought to be his friend, had cheated him; and before long he stood alone and desolate in the streets of London, as badly off as when he first entered Philadelphia.

What would be his thoughts now? He was not the man to despair. He would think to himself, "Well, I can rise once more! I have risen before." Then he would think, "I have learned something. I will not be cheated like this again. I shall know better than to depend upon others. Next time I think I am getting on very fast, I will stop to see if I am safe." Then he would make up his mind, "I will learn, in future, to depend on myself; I will go and find some work at once. *It is much better to rise slowly by one's self, than to rise suddenly by the help of others.*"

It seems as if Franklin learned this lesson, for he soon set to work to mend his fortunes. He first got employment at the house of Mr. Palmer, a celebrated printer. Here he made himself famous, not only as a workman, but by writing a treatise on a religious subject. This brought him under the notice of many eminent men, such as Dr. Pemberton, a friend of Sir Isaac Newton; Sir Hans Sloane, and others.

From Mr. Palmer's Franklin removed, for higher wages, to the office of Mr. Watts, a printer. Here he was soon known for his industry; and his fellow-workmen were also astonished at his temperance and frugality. They had each been accustomed to spend five or six shillings a-week on beer; all day long the beer-boy was seen coming in and out of the office. But he never had the pleasure of bringing any beer for Franklin. His comrades laughed at him, saying, "You will never be able to get through your work." To their surprise, however, they found, as others had done before, that he did more work than any of them, and was more clear-headed.

The character of Franklin thus rose amongst his comrades. At first they nicknamed him the "*American Aquatir*," but some imitated him. He says, "I prevailed on several to renounce their abominable breakfast of bread and cheese with beer; and they procured, like me, from a neighbouring house, a good basin of warm gruel, in which was a small slice of butter, with toasted bread, and nutmeg. This was a much better breakfast, and did not cost more than a pint of beer, namely, three halfpence."

With such economy the frugal and industrious printer again raised himself to comfortable circumstances. In the course of eighteen months he had saved up a store of money, and had much improved his knowledge of the business. He had also made many acquaintances, and had made progress in his studies. He was then planning to take a tour throughout Europe in company with a fellow-workman, when an opportunity was offered to him to return to America.

The gentleman who made Franklin this offer was a Mr. Denham, who was going to begin business in Philadelphia. He agreed to give him £50 a-year as his clerk. Franklin was anxious to be once more in his own country, and accepted the proposal, although he knew he could earn more money in England. They both reached Philadelphia in safety; but Mr. Denham had not been long in business when they were both seized with a violent dis-

order, which brought Franklin to the brink of the grave, and carried off his master.

On his recovery Franklin was once more out of employment. He was therefore glad to go again to his old master, Keimer, who was quite as glad to receive him; for he was still ignorant of his business, and had four or five equally ignorant apprentices. Franklin was employed to instruct these apprentices, and to superintend the business. Here he served his master as faithfully as before. He did all kinds of work for him; he ground the printer's ink, looked after the shop, engraved various ornaments, and, when they had not sufficient type for the press, he set to work to make some. There were no type-founders in America; he himself had never made any type, but he had seen some made in London; he therefore tried to do likewise, and succeeded.

Keimer was ungrateful for this faithfulness; he only wanted Franklin to instruct his apprentices; and, as soon as he had done so, he quarrelled with him, and discharged him. The apprentices, however, had a greater veneration for their teacher than for their master; and one of them, named Meredith, entered into partnership with him as soon as he had left Keimer. Meredith's friends lent the young printers some money. A press, types, &c. were ordered from London, and when they were received, Franklin & Co. began business.

The two partners were very poor. At the time they were

opening their packages they had spent all their money, but, fortunately, a countryman came in to have a job done. "This countryman's five shillings being our first fruits, and coming so seasonably, gave me more pleasure than any crown I have since earned."

One of his friends obtained from the Quakers the printing of forty sheets of a history of that sect.

"Upon these," says Franklin, "we worked exceeding hard, for the price was low. It was a folio. I composed a sheet a day, and Meredith worked it off at press. It was often cloven at night, and sometimes later, before I had finished my distribution for the next day's work; for the little jobs sent in by our other friends, now and then, put us back. But so determined was I to continue doing a sheet a day of the folio, that one night, when, having imposed my forms, I thought my day's work over, one of them by accident was broken, and two pages (the half of the day's work) reduced to *pie*, I immediately distributed and composed it over again before I went to bed."

By such perseverance the

partners soon became known; and business then flowed in upon them rapidly. As they made progress, Franklin, who knew his own talent as a writer, carried out his plan of starting a newspaper. His writings, as usual, delighted the public. The paper was everywhere noticed, and it met with great success. In the course of a short time the partnership with Meredith was dissolved, for soon after the commencement of the newspaper he had become an idle, drunken fellow. Some friends of Franklin, therefore, lent him enough money to pay back that which Meredith's friends had advanced.

Thus was this extraordinary man established in business for himself; he had a thriving trade, a well-circulating newspaper, and a great reputation. He was now a "respectable" man in the very place which, seven years ago, he had entered as a beggar. He had risen as he then said he would. This time he had risen in earnest, because he depended on himself. He practised Order, and INDUSTRY.

THE CHILDREN'S DAY.

How should children spend the day ?
 Early rise and early pray ;
 Then to breakfast, then away
 To labour, or their lessons say ;
 Then to dinner, then to play ;
 To school again then lie away,
 Unless it be a holiday ;
 And when sinks the evening ray,
 Again to God their duty pay,
 And close with prayer the Christian day.

RECAPITULATION.

THE TUDORS.

QUEEN ELIZABETH was the last of the Tudor sovereigns; for, as she was not married, she had no children to succeed her.

L. Then who was appointed king, papa?

P. The son of the unfortunate Mary Queen of Scots. You may remember that when she was married to Henry Stuart, Lord Darnley, she had a little son, who was named James. He was also surnamed Stuart, after his father. James Stuart succeeded Elizabeth, and was the founder of the race of Stuart sovereigns.

We will not begin the history of the Stuarts this month, but to-day you shall have a series of questions on the Tudor race, and in our next lesson you may learn the names and dates of the history we have hitherto studied.

QUESTIONS ON THE TIMES OF THE TUDORS.

1. There was a certain king who began to reign with the consent of nearly all the nation: the last of the Plantagenet kings lay dead in Bosworth field, and to prevent any more wars between the houses of York and Lancaster, the king married Elizabeth, the daughter of King Edward IV. What was his name?

2. Show me why he had a right to be king.

3. Mention two persons who

pretended to have a right to the crown, and tried to dethrone Henry.

4. When Henry had rid himself of his enemies, and was firmly established on the throne, how did he proceed to increase his power?

5. How did he render himself independent of the people?

6. Mention the five ways by which he acquired the wealth he wanted.

7. How did he depress the power of the barons?

8. Give an instance of his severity to the Earl of Oxford.

9. What other class of men had too much power at this time as well as the barons?

10. When Henry had reduced the power of the barons, how did he increase the influence of the people?

11. What did he persuade the people who lived in the *baronial* towns to do?

12. How did Henry secure justice to the poorer classes?

13. A great class of men became almost extinct, taking up a new occupation, partly because there were no wars, and *peaceful* artificers were wanted. What class do I refer to?

14. What system was at last extinguished by these measures of Henry?

15. Mention some of the mistakes which were made in framing new laws.

16. Was Henry VII. a rich or

a poor king at the time of his death?

17. In what year did he die?

18. His successor, HENRY VIII., was like his father because he had good abilities; why was he also unlike him?

19. In 1511, Henry joined in a war, thus beginning a bad course which has since led to bad results. What war was this?

20. What great battle was fought with Scotland in 1513?

21. When Henry had spent all his late father's money and wanted some more, he tried to take it from the people without the consent of the Parliament. When he found that this was a troublesome thing to do, what man did he employ to procure it for him?

22. To what station was this man raised by his master, the king?

23. When this cardinal supplied Henry with money, in what extravagant amusements did he spend it?

24. Mention somebody who was even more fond of money than Henry or his cardinal?

25. What wicked plan did he adopt to raise it?

26. What honest monk was shocked at the Pope's impious course, and stood up to defend the truth?

27. What great movement was begun by this monk?

28. Which party did Henry VIII. side with, the Reformers or the Pope?

29. What title did he receive in consequence?

30. But Henry afterwards

quarrelled with the Pope, and deserted him. Why did he do so?

31. When Henry could not get permission from the Pope to divorce his wife, who helped him out of his difficulty?

32. And when Cromwell became the king's favourite in consequence, what became of his old friend Cardinal Wolsey?

33. Do you remember anything about Wolsey's death?

34. When Henry had thus cast off his wife, his minister Wolsey, and the Church of Rome, the Parliament also threw off all subjection to the Pope. Do you remember what new title was then given to Henry?

35. When Henry thus stood in the Pope's place in England, what other faithful servant did he put to death for not acknowledging his supremacy?

36. What other new servant did Henry adopt, having made him Secretary of State?

37. What work was given to Cromwell to do, partly that he might purify the church, and partly that he might enrich the king?

38. How many religious houses were suppressed, and how much money was brought to the king by the two "commissioners" whom Cromwell appointed?

39. What foolish plan did Henry adopt to enlighten the people and to establish them in the new faith?

40. What better means were afterwards tried for teaching the people?

41. When Henry wanted to divorce his first wife, Catherine

of Arragon, he cast off Wolsey ; when did he cast off his successor, Cromwell ?

42. What was done to Cromwell ? Explain the circumstances that caused Henry to be so enraged against him.

43. Who was Henry's next wife after Anne of Cleves, and what was done to her ?

44. Who was his last wife ?

45. Mention the names of his six wives ?

46. What temper did Henry show during his last days ?

47. In what year did he die ?

48. Who succeeded Henry ?

49. As Edward was only nine years old, who was appointed Protector ?

50. What wise and prudent Archbishop helped the good Duke to carry on the work of the Reformation ?

51. What body of men were

appointed to establish the English Church ?

52. Do you remember any of the acts of this council ? How many declarations, or "articles" of faith, did they prepare ?

53. What bad measures did they adopt, as well as good ones ?

54. Whom did the Duke of Somerset try to procure as a wife for Edward ? Why was he refused ?

55. What instance of injustice and ambition partly led to the fall of the Duke of Somerset ? Who was his principal enemy ?

56. As soon as the Duke of Northumberland had caused Somerset to be beheaded, what did he himself do ?

57. To whom did he cause his son to be married ? and why ?

58. When did King Edward VI. die ? and what was supposed to be the cause of his death ?

LITTLE THINGS.

SCORN not the slightest word or deed,
Nor deem it void of power ;
There's fruit in each wind-wasted seed,
Waiting its natal hour.

A whispered word may touch the heart,
And call it back to life ;
A look of love bid sin depart,
And still unholy strife.

No act falls fruitless ; none can tell
How vast its power may be,
Nor what results unfolded dwell
Within it silently.

Work and despair not ; give thy mite,
Nor care how small it be,
God is with all who serve the right,
The holy, true, and free.

RECAPITULATION.

THE TUDORS.

59. Who was proclaimed Queen of England immediately after the death of Edward VI.? How long was Lady Jane Grey allowed to be queen?
60. Who was proclaimed queen in her stead? What did MARY do to the ambitious Duke of Northumberland as soon as she became queen?
61. Whom else did she cruelly put to death?
62. To whom was Mary married?
63. Why did Mary marry Philip? What religion did she try to restore?
64. For what kind of cruelties was her reign remarkable?
65. Mention some of the principal martyrs.
66. What loss caused such grief to Mary that she almost broke her heart? In what year did she die?
67. When Queen ELIZABETH succeeded her sister Mary, to what important business did she at once apply herself?
68. By what wise counsellors was she assisted?
69. What title was given to Elizabeth because of her efforts to restore commerce?
70. What cruel act of Elizabeth greatly damaged her character? What is the only excuse that can be offered for this deed?
71. The anger of the Pope and the Roman Catholics against Elizabeth was so great that the King of Spain fitted out a great fleet of vessels for the conquest of England—what was that fleet called?
72. Who commanded the English fleet, and what three great admirals assisted him?
73. How did Elizabeth behave on the occasion? What did she say to her army, and where did she address them?
74. Can you tell me any of the particulars of the battle with the Armada?
75. What effect did this victory have on the character of the English Navy?
76. What daring exploits did the Earl of Essex, Sir Walter Raleigh, and others, perform?
77. Do you call such exploits good or bad deeds?
78. What nobleman grew into great favour with the queen about this time?
79. To what office was he appointed on the death of Lord Burleigh?
80. What failure was the beginning of the downfall of Essex?
81. What was his end?
82. What was the state of Elizabeth's mind after his death?
83. In what year did the queen die?
84. Mention several points in the character of Elizabeth.
85. Do you remember anything about her unwillingness to marry? What persons offered themselves to be her husband?
86. Tell me how it was that

Elizabeth was able so much to increase the power of the crown?

87. In whose reign did the sovereigns of England begin to acquire great power?

88. What circumstance arising from the Reformation created a greater reverence in the hearts of the people for the authority of the king?

89. What two courts of justice did Elizabeth particularly make use of to carry out her own will? Which was used for the purpose of religious persecutions?

90. There were certain people who could not approve of the doctrines taught in the English Church. They had been driven by persecution to Geneva, and had learned the doctrines of John Calvin; so that, when they returned to England, they thought they could render the Church even more pure than it was. What were those men called?

91. What was the name of the most celebrated puritan in Scotland?

92. What did Elizabeth do to compel these men to go to church?

93. You may remember, as an instance of the queen's great power, that she raised money by demanding *benevolences*, and

by granting *monopolies*. What is meant by these terms?

94. Mention some circumstances connected with the Hanse Towns of Germany, Newfoundland, and Spitzbergen, which improved the commerce of England.

95. How did the religious persecutions abroad lead to improvement of the English manufactures?

96. Mention a certain desire which was another source of prosperity in England. What important colonies were planted at this time?

97. There was a certain law which compelled the idle to work, and thus added to the prosperity of the nation;—what Act of Parliament do I mean?

98. What still higher feeling added to the glory, as well as the prosperity, of England? Mention the names of some of the celebrated men of her time?

99. Tell me something of the history of each. Who was the great writer of plays? Who were the great reformers? Who was a great merchant? Who were famous admirals? Who were famous astronomers?

100. What, after all, increased more than anything else England's glory and prosperity during Elizabeth's reign?

JESUS.

Go, seek salvation, not by works but grace,
For JESU's died to save our fallen race.
This name of honour our Redeemer wins,
Because he saves his people from their sins.
The hosts above, and saints on earth below,
At th'BLEST NAME in adoration bow.

REV. T. SIMS.

THE ENGLISH TRAVELLER.

LONDON—THE NORTHERN SUBURBS.

"DEAR CHILDREN,—

"Have you ever heard of John Gilpin?" said my friend, as we left the Barnsbury Road.

"Yes, to be sure," I replied.

"Then we are going the way that John Gilpin went.

But let us stop to notice this building. Here, in the Barnsbury Road, is the WHITE CONDUIT HOUSE, where there was once a famous conduit—a very useful place when there was no New River, and the people procured their supply of water from conduits. Until lately the tavern here was very large, and famous tea-gardens were attached; they were often visited by Oliver Goldsmith and other well-known men; but in 1849 the tavern was made smaller, and the gardens were diminished.

"Now let us proceed. Take the first turning to the left and the second to the right." And, having walked down these turnings, we found ourselves at the ANGEL.

"This Angel is not a real one, it is only an inn. It is famous because it is situated at a point where five great roads meet. Here are the City Road, the New Road, Goswell Road, St. John Street Road, and the road to the great northern suburb, Islington. 'This is our road,' said my friend, pointing to the last-mentioned one. We will go all through merry Islington, where 'his gambols he did play.'"

"'But stop one minute,' I said: 'just look at the number of omnibuses. Some are going to Paddington, some to Oxford Street, some to Charing Cross, some to the Post-office and Elephant and Castle, and some to the Bank.'

"Yes, the greater part are going to the Bank. Look at the opposite side of the road, at the inn called the "Peacock." A fresh omnibus arrives every two or three minutes, and it is filled directly it stops. Do you see the one stopping now? Count the people going in—one, two, five, seven—it is full, you see, already. Look, too, at the stream of "pedestrians" pouring down the City Road: they are nearly all clerks; they are the machinery of the mighty City—to be set in motion, for making money, which is the principal business of the City men. You saw London waking up as we walked to Islington; now it is awake; the clerks are making haste; their masters will soon follow them; the shopmen are cleaning their windows, or are setting-out their goods; all seem preparing for a good day's work."

"What is a "good" day's work?"

"It is to work all day so as to please God. I wonder how many men of the City remember that God is over them all. They will all feel a pleasure in doing even very hard work if

they remember that God has given it them to do, for you know that His Providence appoints them their labours.'

"Well! most of the people look very happy," I said, "and if they think of God so as to be truthful and honest when they are working, they will be happy all the day. Look at that man, how pleased he seems! I dare say he is a faithful clerk—a man may be faithful in doing very little things."

"Yes," said my friend, "only those who are not faithful look dull."

"And do such numbers of clerks pour into the City from the other suburbs?" I asked.

"Yes; and besides those travelling thither by omnibus or on foot, whole trainfuls are conveyed by the new railway, which has stations at the northern and eastern suburbs. There are also hundreds of clerks, and hundreds of merchants, who live at a greater distance from town, and come by the Brighton, Greenwich, and other railways.

"But we are not noticing "merry Islington," he continued, for we had now walked some distance. "You see what a pleasant place this is. How broad the road is—how pleasant are the trees between the shops and the road—how pretty that queer old church spire looks above the houses! There is room for it to be seen, which you cannot say of the City churches."

"Yet there are plenty of houses," I said.

"Yes. Now we are getting

into the side streets you will see where the clerks live; here are fine squares with nine-roomed houses for the richer clerks, and others; here is a handsome square with eleven-roomed houses for some of the richest clerks; here again are eight and six-roomed houses for the poorer clerks; here are several long streets of little six-roomed houses—how comfortable and neat they all look!"

"And what a number of churches and chapels! I am sure that the clerks of this neighbourhood ought to remember God—all the steeples they pass on their way to the City point to heaven, and say to them, God's up there."

"But," said my friend, "we cannot visit all Islington. Get out the map of London. See how this enormous suburb is crammed with houses. There are not much less than 100,000 people living in this great parish; it is like a second London.

"The most remarkable places here are—first, the old building called the CANONBURY TOWER. Oliver Goldsmith lodged here in 1764, and it is said that he wrote the Vicar of Wakefield in one of the rooms of the old tower.

"Here, in the lower road, is the place where the famous old public-house, the QUEEN'S HEAD, was situated. Good old Queen Elizabeth is said to have honoured this place with a visit, when Islington was a beautiful country village.

"Beyond Islington is a part called Highbury, where there are fine mansions, and further

on are HORNSEY and HIGHGATE. *Highgate Archway*, the remains of a great tunnel, and *Highgate Hill*, are worth noticing. On this hill is the *Whittington stone*, where the poor boy Whittington is said to have sat when he listened to the Bow bells. The beautiful Whittington Almshouses are also near here.

"But we are going where Mr. John Gilpin went, so let us travel through the Lower Road. Here is the NEW CATTLE MARKET, which Mr. John did *not* see. Here again is Ballspoud. We are now in Kingsland, and are travelling in a north-eastern direction. Let us keep straight on in the Kingsland Road; this is John Gilpin's Road."

"Are you going as far as Edmonton, to see the Bell, where his wife and children stopped?" I asked.

"No; we will rest here at the railway station. I will tell you what places there are beyond. The next neighbourhood is STOKE NEWINGTON, containing the beautiful Abney Park Cemetery, where there is a statue of Dr. Watts, and where many good men are buried.

"The next place is STAMFORD HILL, where the famous man of metal, Rothschild, lived.

"Beyond is TOTTENHAM, or *Tottenham High Cross*, so called from the cross built here by Edward I. In this neighbourhood is the fishing inn *Hughes Ferry*, where the famous fisherman, Mr. Isaac Walton, used to resort.

"Next to Tottenham is EDMONTON, where you may see

the Bell Inn. Over the doorway is a painting of Johnny Gilpin and his industrious horse, with a good memory, who knew his owner had a house full ten miles off, at Ware. But there was no need of such a picture—everybody knows how

"At Edmonton his loving wife
From the balcony spied
Her tender husband, wond'ring
much
To see how he did ride."

"What places are beyond Edmonton?" I said.

"This road," said my friend, "leads into Hertfordshire. Beyond Edmonton are PONDER'S END, ENFIELD HIGHWAY, WALTHAM CROSS (erected by Edward I., because the body of his beloved wife Eleanor rested there on its way to Westminster Abbey), CUESMINT, and so on, until you reach Hertford, which is on the river Lea, about 20 miles from town."

"But there is not time to see these places, as we have to visit the other suburbs to-day; so let us make haste in another direction." Accordingly my friend entered the railway station, and taking our places in one of the trains which run every quarter of an hour, we soon found ourselves in London again.

"Now for the southern suburb," said my friend. "We must cross London Bridge."

"But I have written such a long letter, dear children, that my pen seems very tired—it is sticking in the paper, and will never get over that bridge to-night, so good-by."

"From your affectionate friend,
HENRY YOUNG."

ETYMOLOGY.

CHAPTER III.

INFLECTIONS OF VERBS—INDICATIVE AND POTENTIAL MOODS.

W. I can say the different kinds of verbs which we heard of last week—the *simple*, *compound*, *active*, *passive*, *neuter*, and *auxiliary* verbs. There are two kinds of active verbs—the *active transitive*, and the *active intransitive*.

P. That is right, Willie; and, before we talk of any more verbs, you may point out some of each kind in the sentences which I will give you. I will write all the verbs in italics. First, point out which are the simple and which the compound verbs in the following verse:—

“While some poor creatures scarce
can tell

Where they *may lay* their head,
I have a home wherein *to dwell*,
And *rest* upon my bed.”

Point out the active and neuter verbs in the following verse:—

“May every year but *draw* more
near

The time when strife *shall*
cease;

And truth and love all hearts
shall move

To *dwell* in joy and peace!
Now sorrow *reigns*, and earth
complains,

For folly still her power *maintains*;

But the day *shall yet appear*,
When the might with the right
and the truth *shall be*,

And, *come* what there may to
stand in the way,

That day the truth *shall see*.”

Point out the passive and the auxiliary verbs in the following sentence:—

He did whatever was done by
the others. *He was seen to go up*
stairs, and when the door *was shut*,
and the light *was put out*,
he was found in bed. *He had de-*
termined to sleep soundly.

Notice the active verbs in the following sentence, and point out which are transitive and which are intransitive:—

I looked, but *I saw nothing*;
so *I went back* to my house. There
I met Mary and William, who *had brought* their books from school,
and *were learning* their lessons.
They shut their books, and *laid*
them aside.

P. We will to-day talk of the *parts* of verbs, and of their different *inflections*. The principal parts of a verb are its moods and participles. Do you understand what I mean?

Ion. No; please explain to us.

P. You know what I mean when I talk of a different manner of expressing an action.

Ion. Yes; we understand that.

P. Then the word mood only means manner. Suppose we talk of the action “*sing!*” See in how many different manners I can express it—

“1st, I may simply declare,
“I do sing.”

2nd, I may not declare so much ; only, "I *can* sing."

3rd, I may command you to sing, and may say, "Sing! *Ion*."

4th, I may speak so as to show that it is not certain whether I shall sing; thus—"If I sing."

5th, I may just name the action without saying that I or any one else is performing it; thus—"to sing."

L. So there are five different manners to the verbs.

Ion. Say *moods*; five different moods.

L. Yes; that is what I meant.

P. To-day we will talk of the first two moods—let us take the second one first :

"I *can* sing."

What does that show?

L. It shows that you are able to sing—that you have the power.

P. True; and as the Latin word for power is *potentia*, we call this the *potential mood*. There is another way of expressing the potential mood : you can say, "I *may* sing." When you speak in that manner you show that you have permission to do so, and that it is possible that such a thing may happen.

W. But if you have the permission, that does not show that you have the *power*.

P. No. I may give you permission to go into the street and find a half-crown. What will you say if I do?

W. Why, I shall say, "I may find a half-crown" (if I can); it is quite possible to do so.

Lucy. So there are two ways of making the potential mood. You may say, "I *can* sing" (if I may), which expresses the *power* to do so; or, "I *may* sing" (if I will), which shows that it is possible to do so.

P. Thus, when a word denotes (1.) power, or (2.) possibility, it is called the **POTENTIAL MOOD**.

But the next mood which we shall talk about is a better one; it shows something more than the *power* of doing an action. Listen! •

"I *am* singing."

Ion. Ah! that shows not merely that you have the power, but that you are *using* it. You are *doing* the action. This mood is certainly better than the other. Suppose a poor hungry beggar says, "I *can* eat," it is very pleasant; but it is pleasanter to him to say, "I *am* eating."

P. Yes; such a mood is worth twice as much as the potential. The potential mood expresses one thing—the *power* to perform the action. But the other mood expresses two things—

(1.) The power to perform the action, and

(2.) That you are exercising that power. The Latin word for "to point out" is *indicare*, and, because this mood points out that you exercise the power, it is called the **INDICATIVE MOOD**.

I will say the definitions over again—

DEFINITION. — When a verb shows that you have the power to perform an action, or that you had,

or may have had, or might have had that power, it is called the *Potential mood*.

When a verb shows you are exercising that power, or was exercising, or did, or will exercise it, it is called the *Indicative mood*.

EXAMPLES—*Potential Mood*.

I can sing, shows that I have the power to sing; so it is the potential mood.

I may sing, shows that it is possible that I may sing; so it is the potential mood.

"I remember when I could sing." Here "could sing" shows that I *had* the power to sing; so it is the potential mood.

"He said that I might sing." Here "might sing" shows that it

was possible for me to sing; so it is the potential mood.

Indicative Mood.

I am singing, I *am* singing, I sing; these words point out (1.) that I have the power to sing; (2.) that I am exercising the power; so they are the *indicative mood*.

I was singing, points out that I was exercising the power of singing; so it is the *indicative mood*.

I will sing, points out that I will exercise the power of singing; so it is the *indicative mood*.

In the following parsing exercise, say of each verb whether it is active or passive, transitive or intransitive, &c., and say the mood of the verb.

No. 23. PARSING EXERCISE.

The owl sat in the old abbey and caught a mouse. He can catch other animals; to-morrow he may catch a young bird. The farmer would have caught the owl, but he could not. He said that perhaps he might find him in the morning. I see the moon; it is shining in the sky. The stars will twinkle soon. They did twinkle so last night. He will run alone soon. I have brought him a ship. I may buy him a top, for I think I can afford it

THE TWO WORLDS.

A land where sweetest roses fade,
And smiling youth grows quickly old;
A land where sunshine turns to shade,
And beauty takes a different mould;
A land of change, a land of care,
Whose fleeting joys are little worth;
A land whose smile becomes a tear—
That land is Earth!

A land of love where nought can sever,
And beauty blooms with lustre fair;
A land where youth is young for ever,
For time exerts no influence there;
A land where streams of pleasure flow,
And golden harps to all are given;
A land where we our God shall know—
That land is Heaven!

RECAPITULATION.

P. To-day you may recapitulate some of the *social* events of English history. We will talk more particularly of the inventions.

101. In whose reign were candles first burned to measure time?

102. In whose reign was the curfew bell introduced?

103. By whom was the first stone bridge built?

104. In whose reign was the first menagerie established?

105. In whose reign was it the fashion to wear shoes with long pointed toes chained up to the knees?

106. In whose reign is the mariner's compass said to have been invented?

107. What other inventions were discovered by the "Father of Philosophy" at this time?

108. During what reign were coals first used in London, and windmills brought into use?

109. Where did certain Italian merchants settle, and begin to import silks and spice, and to lend money in interest?

110. In whose reign did the Lollards begin to be known?

111. What law court was established at this time?

112. Whose reign may be remembered by the building of Windsor Castle, the establishment of tolls, the coining of nobles, groats, and half-groats, the appointment of a Speaker to the House of Commons, the introduction of the art of weaving cloth, the adoption of three

celebrated mottoes, the first use of cannon, and the discovery of the Madeira Isles?

113. In whose reign did the first "Champion of England" proclaim the king at his coronation?

114. In what year did William Caxton introduce the art of printing?

115. Whose reign is noted for the discovery of America, the establishment of the Court of Star Chamber, the beginning of the standing army, and the coining of the first shillings?

116. During one reign pins were introduced, cotton thread, the spinning-wheel, and several new flowers, vegetables, beer, and other articles of food, were introduced; sovereigns were first coined, the title of "Your most gracious Majesty" was instituted; the first Secretary of State was appointed; the order of Jesuits was founded, the name of Protestants was adopted, and Hampton Court and Whitehall were built. In which reign did these numerous events happen?

117. In whose reign were tobacco and potatoes introduced? The cod fisheries of Newfoundland, the whale fisheries of Spitzbergen, the slave trade, and the East India Company also arose at this time. Do you remember when these things happened?

118. In whose reign were Normandy and England first governed by one king?

119. When did the English lose Normandy; and what cruel deed was it that induced the Norman barons to desert the English king?

120. In whose reign was Calais taken from the French?

121. In whose reign did the English lose Calais?

122. In whose reign was Ireland conquered?

123. In whose reign was Wales added to the kingdom of England?

124. By what king was Scotland *nearly* conquered, and added to his kingdom?

125. What king conquered France, and was declared heir to the French crown; and why did he not become king of that country?

UP, UP !

"Up, up!" cries the wakeful Cock:
 "Did you not hear the village clock?
 I have been up for an hour and more,
 Crowing aloud at the stable door.
 Dobbin has gone with the boy to plough,
 Betty has started to milk the cow;
 Sure there is plenty for all to do,
 And all are up, young friend, but you."

"Up, up!" cries the scouring Lark,
 "Only sleep, my young friend, in the dark;
 Oh! let it never, never be said
 You wasted the morning hours in bed.
 Out of the window glance your eye,
 And see how blue is the morning sky;
 Open the casement, your slumber spare,
 And smell how fresh is the morning air."

"Up, up!" cries the busy Sun;
 "Is there no work, little friend, to be done?
 Are there no lessons to learn, I pray,
 That you lie dozing the hours awny?
 Who would give light to the world below,
 If I were idly to slumber so?
 What would become of the hay and corn,
 Did I thus waste the precious morn?"

"Up, up!" cries the buzzing Bee,
 "There's work for you as well as me;
 Oh! how I prize the morning hour,
 Gathering sweets from the dewy flower:
 Quick comes on the scorching noon.
 And darksome night will follow soon;
 Say, shall it chide for idle hours,
 Time unimproved, and wasted powers?"

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

23rd Week.

MONDAY. Moral Biography.

INDUSTRY.

BENJAMIN FRANKLIN, THE PRINTER.

P. How much a man may live in seven years!

In seven years the boy with the Dutch dollar in his pocket rose to respectability; sailed to the other side of the world; became poor again; then rose once more; became a clerk, and became poor again; and then, once more, he gradually rose to honour and prosperity.

But, although Franklin was prosperous, he was not proud. On the contrary, he still dressed plainly, and deportcd himself humbly. To show that he was not above his business, he sometimes wheeled home in a barrow with his own hands the paper which he had bought to print upon.

About this time he married, and his wife was fortunately as industrious as himself. She helped him in his business, folded the sheets of books which he printed, kept his shop, and executed other humble duties. Like himself, also, she loved exactness and economy, and agreed to live in a humble style.

It is not always easy to be getting riches and learning at the same time. Those who make much money are often so fond of it, that they give all their time to such employment;

then they have so little time to enrich their minds, that they are compelled to neglect their studies. But Franklin knew better than to do this. He so divided each day that he gave to each duty its proper attention. He rose at five in the morning; and gave three hours to study, devotion, and breakfast; from eight till twelve he was at work; from twelve till two he read; from two till five he was again at work; from six till ten he devoted to reading, conversation, and supper; at ten he again went to bed, and rose the next morning at five. Thus we see that early rising was one of the maxims that Franklin practised. He proved the truth of his own saying—

“Early to bed and early to rise
Makes a man healthy, wealthy,
and wise.”

To this early rising Franklin owed the greater part of his success; for he thus had both time and health. To tell you of all the studies which he pursued, and of all the honours that he gained, or of the riches which he acquired, would I think tire you.

I will mention the principal facts. He says of his studies,

"I had begun in 1773 to study languages. I soon made myself master of the French. I then undertook Italian. I afterwards, with a little pains-taking, acquired as much of the Spanish as to rend their books also. I have already mentioned that I had only one year's instruction in a Latin school; but when I had attained an acquaintance with the French, Italian, and Spanish, I was surprised to find, on looking over a Latin Testament, that I understood more of that language than I had imagined. I was therefore encouraged to apply myself to the study of it, as the preceding languages had greatly smoothed my way."

Franklin, however, was renowned not only for his learning, but as a man of science. His discoveries in electricity have rendered his name famous all over the world. Most children have in these days seen experiments in electricity, and know something about the matter; but this was not the case in Franklin's time. When he was one day at Boston, he saw some experiments performed, and his curiosity was strongly excited. He procured an apparatus, and performed similar experiments in Philadelphia. He soon added other experiments of his own, and in the course of time his house was constantly filled with persons who came to see the new wonder. That which most surprised them was the new jar, which was charged with electricity, and which, on their

touching it, caused a violent shock. This was called the Leyden jar, for its wonders had just been discovered in the year 1746, at Leyden in Germany. It is now a very familiar thing, as it is used in most electrical experiments.

The experiments of Franklin did not end in mere amusement. He liked to turn all his knowledge to good account. His mind was always speculating about the *cause and effect* of everything that he did. He wanted to know exactly what electricity is; where it came from; why it passed into one person, and not into another; which substances were *conductors* of electricity, and which were not—so he proceeded to electrify himself and other people, and to try all kinds of experiments, until he had found answers to his questions. During these operations he invented the *Electrical Battery*. When he had learned the reason of all he saw, he gave the world a full account of the subject, and those things which beforehand had puzzled the men of science, were now made plain to them. People began to understand electricity much more perfectly, and Franklin began to be looked upon as one of the founders of the science.

His account of electricity, or *Franklin's Electrical Theory*, as it was called, was a great gift to the world; but the brilliant discovery which he afterwards made was of still greater advantage, and rendered him still more famous.

This discovery was, that light-

ning and electricity are similar fluids.

Hitherto, men knew that there was electricity in amber, glass, sulphur, sealing-wax, resin, and various other substances; but it was a bold idea to suppose that there was electricity up in the clouds.

I dare say that Franklin walked about for a long time with this new idea in his head. What could he do with it? It was a very tormenting thing. He would say to himself, "I feel a strong suspicion that lightning is electricity, but how can I tell that it is so? I cannot get up in the clouds!"

W. Of course he could not do that, so he must stop on the earth, and leave the question alone.

P. But he was not the man to leave the question unanswered; he had answered other questions before. He had been accustomed to overcome difficulties all his lifetime, and he would not leave this unconquered. Still it would torment him. Every day his mind would say to him, "You cannot get up to the lightning."

W. It was very impudent of the difficulty to torment the great Franklin in that manner!

P. Very. But he never thought of letting it conquer him; so at last he overcame it, as a brave man ought to do. He answered, "Very well, Mr. Lightning! if I can't get up to you, you can come down to me. I have seen you dancing zig-zag through the air; I know how you have struck men to the ground; you can come down; and you must

—and (if you are electricity) you shall!"

Ion. It is all very fine to talk so; but how would he make it come down? He couldn't stop it! It wouldn't come straight!

W. No, of course not; it would jump about.

P. You shall hear. He had observed how pointed bodies draw off electricity. So he said to himself, I will make a long pointed body of some substance which is a "*conductor*" of electricity; and I will put it on a very high tower, or some other place, where it can reach the clouds.

A high spire was about to be built in Philadelphia, which he intended should answer for the purpose of attracting his unmanageable friend, when he thought of something else. He happened to see a boy flying a kite, and it at once occurred to him that this was the best and easiest way of reaching the clouds. He thought, "I will fly a kite with a wet string, down which the lightning will pass." So he went home directly, took a large silk handkerchief, stretched it across two sticks, thus formed his kite, and put it aside until the next thunder-storm should happen.

An opportunity for the experiment soon after presented itself; the sky was darkened with black thunder-clouds; so he went forth into a field near the city, only taking with him his kite, and his son to assist him in raising it. He did not let any one else know what he was going to do.

W. I should think that he

took his son to *carry* the kite. How the public would have stared to see the great Mr. Franklin walking through Philadelphia, carrying in his hand a kite made of a handkerchief!

P. True. But I will read you the account of his experiment.

"The kite being raised, he fastened a key to the lower end of the hempen string, and then, attaching it to a post by means of silk, he placed himself under a shed, and waited the result. For some time no signs of electricity appeared. A cloud, apparently charged with lightning, had even passed over them without producing any effect. At length, however, just as Franklin was beginning to despair, he observed some loose threads of the hempen string rise and stand erect, exactly as if they had been charged with electricity. He immediately presented his knuckle to the key, and, to his inexpressible delight, drew from it the well-known electrical spark. It is said that his emotion was so great at this discovery, that he heaved a deep sigh, and felt that he could that moment have willingly died. As the rain increased, the cord became a better conductor, and the key gave out its electricity copiously. Had the hemp been thoroughly wet, the bold experimenter might, as he was contented to do, have paid for his discovery with his life."

Franklin afterwards brought the lightning down into his house by means of an iron rod. Thus, he tried at his leisure all the experiments that could be performed with electricity.

His active mind soon thought of turning his discovery to a useful end. He thought of the well-known plan of preserving

buildings from lightning by attaching a long pointed iron rod, reaching upwards from the ground to some distance above the building. I dare say you have often seen such a rod. It is useful because if, in a storm, the lightning were going to strike the building, the point of the rod would attract it, and conduct it safely to the earth.

The result of this discovery to Franklin himself was also most pleasing. He now received the praise and respect which he so richly deserved. The account of his discoveries fell into the hands of the great naturalist Buffon; it was soon translated into most modern languages; and became known in France, Germany, and throughout Europe. In England the account was not at first received favourably; when read to the Royal Society, it was laughed at. As soon, however, as it caused such excitement on the Continent, the matter was considered again; and the men of science in England made Franklin every amends for their mistake. A gold medal was sent him by the Royal Society; he was made a member without being permitted to pay the fees; and honours of all kinds were conferred on him by the various universities.

Here let us stop and think. Let us rejoice for Franklin. It has been said, "No philosopher of the age now stood on a prouder eminence than this extraordinary man. He had been in the humblest circumstances;

he was one of the most obscure of his success; but we will speak of these matters in our next lesson. I have yet to show himself to all this distinction almost without the help of any education, except such as he had given himself."

If there were time, we might look once more at the reasons which he died.

THE MECHANIC'S SATURDAY NIGHT.

To-morrow will be Sunday, Ann—

Get up, my child, with me;

Thy father rose at four o'clock

To toil for me and thee.

The fine folks use the plate he makes,

And praise it when they dine;

For John has taste—so we'll be neat,

Although we can't be fine.

Then let us shake the carpet well,

And wash and scour the floor,

And hang the weather-glass he made

Beside the cupboard-door.

And polish thou the grate, my love,

I'll mend the sofa arm;

The autumn winds blow dump and chill;

And John loves to be warm.

And bring the new white curtain out,

And string the pink tape on—

Mechanics should be neat and clean:

And I'll take heed for John.

And brush the little table, child,

And fetch the ancient books—

John loves to read; and when he reads,

How like a king he looks!

And fill the music-glasses up

With water fresh and clear;

To-morrow, when he sings and plays,

The street will stop to hear.

And throw the dead flowers from the vase,

And rub it till it glows;

For in the leafless garden yet

He'll find a winter rose.

And lichen from the wood he'll bring,

And mosses from the dell;

And from the sheltered stubble-field

The scarlet pimpernell.

EBENEZER ELLIOTT.

RECAPITULATION.

P. I HAVE brought you once more the table of names and dates to recapitulate.

W. I have nearly forgotten all my *dates*, papa, and I cannot easily remember the *names*. I forget the order in which the kings reigned.

P. And you may learn their names many times, but you will soon forget them unless you know *why* the kings succeeded one another. You will find, too, that by comparing the dates, and observing their peculiarities, you may learn them so as to remember them always.

Ion. Please, papa, show us how to do that. I am almost as bad as Willie, I forget so much.

P. Very well, we will first write out the table; we will then write out the history of the different successions, and I will next give you some questions on the dates.

L. Which shall we learn first, papa? Shall we learn the "history of the succession," and the answers to your questions on the dates; or shall we learn the table first?

P. The best way is to commit the table to memory first, without any help; but the easiest way is to learn the other two parts first, for if you know them perfectly you will learn your names and dates almost without trouble. We will begin with the reign of William the Conqueror.

TABLE OF NAMES AND DATES.

1066 William I.

1087 William II.

1100 Henry I.

1135 Stephen.

1154 Henry II.

1189 Richard I.

1199 John.

1216 Henry III.

1272 Edward I.

1307 Edward II.

1327 Edward III.

1377 Richard II.

1399 Henry IV.

1413 Henry V.

1422 Henry VI.

1461 Edward IV.

1483 Edward V.

1483 Richard III.

1485 Henry VII.

1509 Henry VIII.

1547 Edward VI.

1553 Mary.

1558 Elizabeth.

1603 Death of Elizabeth.

Let us now trace why each king succeeded to the crown of England.

THE ORDER OF SUCCESSION.

(To be committed to memory.)

WILLIAM I. became king because he conquered and killed Harold in the battle of Hastings.

WILLIAM II. succeeded, because he was the favourite of his father, who bequeathed the crown of England to him, and only gave the dukedom of Normandy to his elder brother Robert, who had formerly rebelled against him.

HENRY I. gained the crown because he was William the Con-

queror's youngest son, and his elder brother was absent, engaged in the Crusades.

STEPHEN usurped the crown, although it was bequeathed by Henry to his daughter Matilda, because, as his father, the Count de Blois, had married Adela, William the Conqueror's daughter, he himself was that king's grandson, while Matilda was his granddaughter.

HENRY II. succeeded, because when Stephen lost his son Eustace, and had no one to succeed him, a treaty was made, which stipulated that he should reign after Stephen's death.

RICHARD I. succeeded, because he was King Henry's second son; his eldest son, Prince Henry, having died.

JOHN succeeded, because he was the *fourth son* of Henry II., and because the crown was bequeathed to him by Richard. The proper heir, however, was Prince Arthur, the son of Henry II.'s *third* son, Geoffrey; but it is said that John murdered this prince.

HENRY III. succeeded, because he was John's eldest son. His character was weak, like that of his father.

EDWARD I. succeeded, because he was Henry's eldest son. His character was a contrast to that of his weak-minded father, for he was distinguished for his bravery and energy.

EDWARD II. was the son of Edward I., and his character, again, was a contrast to his father's; he was as cowardly as his father was brave.

EDWARD III. was Edward II.'s son, and his character, again, was a contrast to his father's, for he was a sagacious and active king.

RICHARD II. was Edward III.'s

grandson, the king's son, *Edward the Black Prince*, having died. His character, again, was a contrast to that of Edward III., for he was feeble and foolish.

HENRY IV. succeeded, because when the weak-minded Richard treated him unjustly, and banished him, he returned to England, imprisoned the king in Pontefract Castle, where he was murdered with a poleaxe. His character, again, was totally different to Richard's, for he was a man of prudence and bravery.

HENRY V. was Henry IV.'s eldest son, and was even more wise and brave than his father. He conquered the kingdom of France.

HENRY VI. succeeded his father, and, unlike him, was totally unfit to be a king. His kingdom was governed, and his battles were fought, by his wife Margaret.

EDWARD IV. succeeded because he belonged to the house of York, and defeated the troops of Henry in one of the terrible battles between the houses of York and Lancaster.

EDWARD V. succeeded because he was Edward IV.'s little son.

Richard III. succeeded, because he was the brother of Edward IV., and he caused the young Edward V. to be murdered in the Tower, in the same manner as John, the brother of Richard I., murdered his nephew Arthur.

HENRY VII. succeeded because he was the grandson of Catherine, the wife of Henry V., who, on that king's death, married Owen Tudor, a Welsh gentleman.

HENRY VIII. succeeded because he was the son of Henry VII.

EDWARD VI. was the son of Henry VIII.

MARY was the elder sister of Edward VI., being the daughter of

Henry VIII.'s first wife, Catherine of Arragon.

ELIZABETH was Mary's sister, the daughter of Henry VIII.'s second wife, Anne Boleyn.

Jon. I think I can soon learn this account, papa; I know most of the facts.

P. I may as well add one or two questions, which will further help your memory.

126. How many sons had William the Conqueror; and which succeeded him?

127. Name the four sons of Henry II., and say which succeeded him?

128. There were three kings; each had *one* son who would have succeeded him but that he died before his father: the son of the first of these kings was shipwrecked; the son of the second died just before the signing of a treaty; and the son of the third king died of disease after showing great bravery in the battles of Crecy and Poictiers. Mention the name of each king and his son.

129. What king was conquered and his son butchered by the conqueror?

130. How many sons had King Edward V.? How many sons had King Edward VI.? Queen Mary? Queen Elizabeth?

131. Who was the first *Saxon* king of all England?

132. The first *Danish* king?

133. Who began the *Norman* line of kings?

134. Who began the *Plantagenet* line?

135. Which Plantagenet began the House of Lancaster?

136. Which Plantagenet began the House of York?

137. The last Plantagenet?

138. The first Tudor?

139. The last Tudor?

L. Now, papa, will you let us have some questions on the dates?

P. Very well.

ON THE DATES OF THE SUCCESSIVE REIGNS.

(*The answers to be committed to memory.*)

140. There were three great kings, each reigned 35 years; mention their names, and when their reigns began and ended.

141. Three kings of the same name;—together, they reigned a century and five years; the first two reigning 35 and 20 years, the last 50 years. Their names, and the beginning and end of their reigns?

142. Two foolish kings, each the *second* king of his name. Each began to reign at a date containing the number 13 and 7; the first reigned 20 years, the second 22 years. Both were cruelly murdered. Say when the reign of each began and ended.

143. There was a very cruel king who also reigned 22 years; when did his reign begin and end?

144. The first king of each line began to reign either near the middle or the end of a century.

Thus the first

Norman—William I. . 1066.

Plantagenet—Henry II. 1154.

Lancaster—Henry IV. . 1399.

York—Edward IV. . 1461.

Tudor—Henry VII. . 1485.

Commit these dates to memory.

145. How many years did the Norman line of kings reign?

146. The Plantagenets?

147. The Tudors?

148. What king began to reign in the year 1100? Which in 1199?

Which in 1307? Which in 1399?

Which in 1509? Which in 1603?

149. There were certain kings

whose reigns did not exceed ten years :—

Thus, Richard I. reigned 10 years ; Henry V. 9 years ; Edward V. 2 months ; Richard III. 2 years ; Edward VI. 6 years ; Mary 5 years. Prove the length of these reigns by the dates of their beginning and end.

150. Mention the first king in

each century from the year 1066 to the year 1603.

This question will end our Recapitulation. When you can answer these 150 questions perfectly you shall hear of the history of England after the times of the Tudors.

THE DEATH OF THE FLOWERS.

THE melancholy days are come, the saddest of the year,
Of wailing winds, and naked woods, and meadows brown and bare.
Heaped in the hollows of the grove the withered leaves lie dead ;
They rustle to the eddying gust and to the rabbit's tread.
The robin and the wren are flown, and from the shrub the jay,
And from the wood-top calls the crow through all the gloomy day.

Where are the flowers, the fair young flowers, that lately sprung and stood
In brighter light and softer airs, a benignant sisterhood ?
Alas ! they all are in their graves : the gentle race of flowers
Are lying in their lowly beds with the fair and good of ours.
The rain is falling where they lie : but the cold November rain
Calls not from out the gloomy earth the lovely ones again.

The wind-flower and the violet, they perished long ago,
And the wild-rose and the orchis died amid the summer glow ;
But on the hill the golden-rod, and the aster in the wood,
And the yellow sun-flower by the brook in autumn beauty stood,
Till fell the frost from the clear cold heaven, as falls the plague on men,
And the brightness of their smile was gone from upland, glade, and glen.

And now, when comes the calm, mild day, as still such days will come,
To call the squirrel and the bee from out their winter home,
When the sound of dropping nuts is heard, though all the trees are still,
And twinkle in the smoky light the waters of the rill.
The south-wind searches for the flowers whose fragrance late he bore,
And sighs to find them in the wood and by the stream no more.

And then I think of one who in her youthful beauty died,
The fair meek blossom that grew up and faded by my side :
In the cold moist earth we laid her when the forest cast the leaf,
And we wept that one so lovely should have a life so brief ;
Yet not unmeet it was that one like that young friend of ours,
So gentle and so beautiful, should perish with the flowers.

THE ENGLISH TRAVELLER.

LONDON—THE SOUTHERN SUBURBS.

"**M**Y DEAR CHILDREN,—

"We have crossed the bridge, and here we are.

"Where?

"Why, we are not in London any longer, nor in Middlesex; we are in the suburb called SOUTHWARK.

"Look at your map, and you will see that the Thames flows between Middlesex and Surrey, so that Southwark is in Surrey.

"Turn your face to the left," said my friend; and on looking I saw a large railway terminus.

"This is more than one railway terminus," said my friend. "At this place no less than five railways end. Here are the termini of the Dover, the Brighton, the GREENWICH, the NORTH KENT, and the CROYDON Railways.

"But we must keep on in the straight line. This broad street is called the BOROUGH. We pass near to *St. Thomas's Hospital*, *Guy's Hospital*, *Horse-manger Lane Jail*, the *Queen's Bench Prison*, *Training School of the British and Foreign School Society*, and here we are at the ELEPHANT AND CASTLE.

"The Elephant and Castle is another great inn, situated at a point where several roads meet. It is therefore in the south of London what the Angel is at the north; it is the great station for omnibuses.

"Look!" said my friend, "how the omnibuses congre-

gate. Ah! that reminds me of something. I'll tell you an anecdote.

"The Londoners, to save time, like to shorten all names. Thus, for the *Bricklayers' Arms*, which is the name of another inn where omnibuses stop, a driver would talk of "the Bricklayer."

"An omnibus was once jogging along, which, as will be the case sometimes, had very few passengers inside. There were two going to the Elephant and Castle, and one to the Bricklayers' Arms. The driver was anxious to know how he was getting on, and called to the conductor, "Bill, what have you got inside?" "Oh," says Bill, "there's nussin' yet—only two *Elephants and a Bricklayer!*"'

"That's rather too short a way of talking," I replied. "It must be plensanter to drive an omnibus in the northern suburbs; then the three passengers might have been two Angels and a Peacock!—two gentlemen and one lady."

"Two ladies and a gent, you mean," said my friend, "you rude fellow. But there! we are talking nonsense; let us talk of the southern suburbs.

"The road in which we now stand is called the WALWORTH ROAD. Beyond Walworth are CAMBERWELL and PECKHAM; the road on our left hand leads to KENNINGTON, and beyond to

BRIXTON and other parts. Merchants and others go to the City from these localities every day.

"But we shall not have time to see these places; we will return home. On our way we pass the beautiful SCHOOL FOR THE INDIGENT BLIND—the great ROMAN CATHOLIC CATHEDRAL, which is to cost £100,000. We are now at the Blackfriars Road. Here is an omnibus to the City—jump in."

"THE EAST.—'Come,' said my friend after dinner, 'it is getting rather late. Let us sally forth eastward.' Accordingly we soon found ourselves in a neighbourhood called ALDGATE.

Aldgate is so called from the 'old gate,' which was an entrance to the City until the year 1606. Here is the enormous establishment of the noted Jew-tailors, MOSES AND SON. We also passed through the Minories, a place which derives its name from the nuns, called Minor-esses, who lived in a convent here. In the Minories, and another place called HOUNSDITCH, we saw great numbers of Jews.

We next reached WHITECHAPEL, so called from—I really can't say what; not from any particularly snowy places of worship there. We did not see one chapel, and if there were any they must have been

so black that we could not observe them, for the place was in many parts very dirty. We saw, however, the great JEWS' BURIAL-GROUND, in which the rich *Rothschild* lies buried; but the most striking sight of all in Whitechapel was the long row of butchers' shops. These shops, or shambles, have long been the great distinction of Whitechapel.

"Beyond the butchers' shambles are the MILE END ROAD and BETHNAL GREEN.

Another eastern district is that bordering on the Thanes—part of which we have talked of before. Starting from London Bridge, you reach St. Katherine's Docks, the London Docks, Wapping, Shadwell, Limehouse, West India Docks, and Blackwall. But we are too tired to go there. 'Indeed,' said my friend, 'if we do not make haste we shall be unable to visit the West. We have many miles to travel to reach the other side of London, so get into another omnibus.'

"Hoy! Conductor! Hoy, stop."

"Conductor: 'Hold hard!' •

"We are off to the West, dear children, where the sun sets; so, following the sun's example, I beg to rest for today, and remain your faithful friend,

"HENRY YOUNG."

THE QUIET MIND.

FEAR oftentimes restraineth words,
But makes not thoughts to cease;
And he speaks best, that hath the skill
When for to hold his peace.

ETYMOLOGY.

CHAPTER III.

THE INFLECTIONS OF VERBS—THE IMPERATIVE, SUBJUNCTIVE,
AND INFINITIVE MOODS.

P. Besides the Indicative and Potential moods of the verb to sing, I gave you three other moods—

3. If I sing.
4. Sing.
5. To sing.

Here are some examples of the first mood, marked 3—

- I shall be ill if I sing.
- I am sorry if I did sing.
- If I were singing I would make you be quiet.
- I may dance though he forbid me.
- I will give you a shilling if you be good.

Ion. Some of these verbs are alike, because they have *if* before them. One has "though."

P. Yes; in each of these sentences there is one verb which shows the condition on which the other verb depends. Thus,

I will give you a shilling—*condition*, if you be good.

I shall be ill—*condition*, if I sing.

Such verbs, when they are joined to another for such a purpose, are said to be in the CONDITIONAL MOOD.

W. Now let us try the mood of the next instance, "Sing."

P. In this instance, I command you to sing; and as the Latin word for command is *imperare*, we call such a mood

the IMPERATIVE Mood. This mood is also used sometimes for entreaty. "Let me sing." "Let him go."

W. I will say it over again. When a verb is used to command, or entreat, it is in the Imperative mood. Thus,

- Jump, puss.
- Let me pass, puss.
- Come, Tom.
- Do, Mary!

Ion. And what mood do you call to *dance*, papa?

P. "To dance" merely expresses the verb in a general way. It does not mention any person in connection with it. Such a manner of expressing the action (by merely naming it) is called the INFINITIVE MOOD. You can easily make examples of such a mood.

W. Yes; I will make some verbs in the Infinitive mood.

- To walk.
- To fight.
- To run.
- To sneeze.

P. As the Infinitive mood is merely the *naming of an action*, it is sometimes used like a noun; it may become the nominative case to a verb. Thus—

To jump across is dangerous.

W. I can understand that. To jump across is an action; so

you mean the action is dangerous. The word action expresses a real thing, so it is a noun.

P. I will make the rule for you on these three moods.

RULE.—When a verb expresses a condition, it is said to be in the CONDITIONAL MOOD.

When a verb commands, it is in the IMPERATIVE MOOD.

When a verb merely expresses

the name of the action, and has the little word *to* before it, it is in the INFINITIVE MOOD.

EXAMPLES.—If I succeed. Succeed! To succeed.

W. Now we have heard of five moods of the verb—

The POTENTIAL MOOD,
The INDICATIVE MOOD,
The SUBJUNCTIVE MOOD,
The IMPERATIVE MOOD, and
The INFINITIVE MOOD.

No. 24. PARSING EXERCISE.

Go! show your face to those who like you better. I cannot bear you. I may reach home before eleven, if it do not rain. To see the rain will not be agreeable. I have lost my umbrella. Find it for me. Let me look. To look is useless. I have found it. Look again, you may find another. You will, if you try. He told me I might sing, but I could not. I may have sung. He would have eaten all the dinner. Let us go home. Go, then! I was going home.

A VISIT TO THE LAMBS.

Come, let us go and see the lambs;
This warm and sunny day
I think must make them very glad,
And full of fun and play.

Ah, there you are. You pretty things!
Now; don't you run away;
I'm come on purpose, with mamma,
To see you this fine day.

What pretty little bents you've got,
And such good-natured eyes;
And ruff' of wool all round your necks—
How nicely curled it lies.

Come here, my little lambkin, come
And lick my hand—now do:
How silly to be so afraid—
Indeed, I won't hurt you.

Just put your hand upon its back,
And feel how nice and warm:
There, pretty lamb, you see I don't
Intend to do you harm.

THE ENGLISH TRAVELLER.

LONDON—THE WESTERN SUBURBS.

"**M**Y DEAR CHILDREN,—

"What a nice fire that is!" said my friend, "lend me the poker;" and with that he gave such a poke between the ribs of the grate, that the fire burst forth into lively flames. "There! that's a famous fire," he remarked.

"I did not tell you in my last letter that when we left the Whitechapel omnibus we went home to tea before setting out for the Western suburbs. And now, the tea being finished, my friend seemed not at all inclined to move. 'You do not know what you talk about,' he remarked, 'when you say you'll go to the further end of London; you forget that you will have to travel four or five miles at least, before you can reach the West-end. I'll tell you what to do, as you say you *must* leave to-morrow. Get me the map of London again, and I will point out the places for you. You have been as far as the Exhibition twice, so that you know part of the neighbourhood pretty well.'

"Accordingly I procured the map.

"Look for a place called the Haymarket," said my friend.

"Here it is," I replied, "near Charing Cross."

"The HAYMARKET is so called, because a market for hay was kept there until the year 1830. It contains the *Haymarket Theatre*, and the Great

Italian Opera House, called *Her Majesty's Theatre*. This is the largest theatre in Europe, except *La Scala* at Milan.

"But the great sight to be seen when you are at the West is the PALL MALL, of which we have spoken. This place is so called from a game of that name, which was first played in England in the time of CHARLES I. In the part of the year called the London season, all kinds of carriages, of the most splendid styles, may be seen, daily, rolling along Pall Mall; and, if you did not know better, you would think, from the fashionable appearance of the ladies and company, that they were all enjoying some grand holiday.

"Pall Mall is the region of the splendid club-houses, of which also you have heard. There are altogether about forty clubs in London. In these great palaces the nobles, members of Parliament, politicians, men of fashion, and literary men meet. Here they spend their leisure hours in reading, in conversation, and in taking refreshment. Some of the finest of these magnificent houses are the UNIVERSITY CLUB HOUSE, the TRAVELLERS' CLUB, the ATHENAEUM CLUB, the CARLTON CLUB, the ARMY AND NAVY CLUB, the UNITED SERVICE CLUB, and the REFORM CLUB.

"After passing through Pall Mall you may turn to the right,

up St. James's Street, into PICCADILLY; and so on, past HYDE PARK CORNER to the GREAT EXHIBITION. But you have already travelled in that direction, so, if you like it better, you may stop at ST. JAMES'S PALACE.'

"'Here it is,' I said, pointing to it on the map; 'it is at the end of Pall Mall.'

"'Then pass through this old palace, and you will find yourself in St. James's Park. Continue in the same direction as Pall Mall, and you reach BUCKINGHAM PALACE, the residence of Her Majesty. This building is not popular, although it has cost the public millions of money; the marble arch, which once formed the entrance, cost £80,000; and the expense of the metal gates was 3,000 guineas.

"'Beyond Buckingham Palace is the fashionable neighbourhood called PIMLICO. Adjoining Pimlico is Vauxhall. You must not, however, travel in that direction, but take the direction of Hyde Park Corner. Have you found it on the map?'

"'Yes; here it is.'

"'Here begins KNIGHTSBRIDGE, and beyond Hyde Park is the beautiful public promenade called KENSINGTON GARDENS. When you have visited these Gardens, and have heard the military band play, you may set out for any of the neighbouring suburbs. Here are BAYSWATER, BROMPTON, CHELSEA, PUTNEY, HAMMERSMITH, and FULHAM.'

"'All of these places, although they are so far from the City,

are inhabited by the rich, money-making men of business, for whom London is famous.'

"'There! Now I hope you have heard enough; for that is all I am going to tell you about London or its suburbs,' said my friend. 'Say to me, "Thank you," for taking so much trouble.'

"'Thank you,' I said; 'but before we leave our subject, just let me write down the names of the suburbs, that you may see whether they are correct.'

THE SUBURBS OF LONDON.

North.

Clerkenwell.	Stoke Newington.
Pentonville.	Tottenham.
Islington.	Edmonton.
Highbury.	Enfield.
Holloway.	Waltham Cross
Highgate.	Cheshunt.
Kingsland.	Hertford.
Clapton.	
Stamford Hill.	

South.

Southwark.	Walworth.
The Borough.	Camberwell.
Blackfriars Rd.	Peckham.
Newington	Kennington.
Butts.	Brixton.

East.

Houndsditch.	Lon. Dock, &c.
Minories.	Shadwell.
Aldgate.	Wapping.
Whitechapel.	Limehouse.
Mile End Road.	W. India Docks
Bethnal Green.	Blackwall.

West.

Westminster.	Knightsbridge.
Charing Cross.	Kensington
Haymarket.	Gardens.
Regent Street.	Bayswater.
Piccadilly.	Kensington.
Pall Mall.	Brompton.
St. James's Park.	Chelsea.
Pimlico.	Fulham.
Vauxhall.	Putney.
Hyde Park.	Hammersmith.

"That will do," said my friend. "I think that, on the

whole, you have given those children whom you write to so often a long account of London. Come, let us turn round to the fire. We will have a chat before supper, and we will go to bed soon, because we were up so early this morning."

"What we talked about before we went to bed does not concern you; so, dear children,

I remain,

"Your faithful friend,

"HENRY YOUNG."

SONGS ABOUT TREES.

NO. I.—THE SONG OF THE OAK.

Who hath not heard of the old Oak-tree,
The king of the forest, the lord of the vale;
That growtheth so stately and groweth so free,
Rearing its head to the storm and the gale;
That spreadeth its branches so high and so wide,
With a shelter for beasts and a home for the bird;
That standeth so long in its glory and pride—
Who hath not heard, tell me, who hath not heard
Of the Oak of Old England—the glorious tree?

Who hath not heard of the gnarled old Oak,
So rugged and rough, and so sound at the core?
See how the woodman, as stroke follows stroke,
Wipes his hot brow, and is fain to give o'er:
Sawn through the middle at last it comes down—
Mourn for the monarch laid low in his pride,
Lifting no more to the heavens his crown,
Spreading no more his huge limbs far and wide—
Who hath not heard of the rough gnarled Oak?

Who hath not heard of the old forest tree,
Showering his acorns, a feast for the swine;
Giving his timber, that builded may be
Strongest of vessels that float on the brine?
History tells of him many a tale,
Poesy sings of him many a song;
Rich are his robes, when the shrill autumn gale
Whistles and eddies the woodlands among—
Who hath not heard of the famed British Oak?

II. G. ADAMS.

PLEASANT PAGES.

A JOURNAL OF INSTRUCTION FOR THE FAMILY AND THE SCHOOL.

24th Week.

MONDAY. Moral Biography.

INDUSTRY.

BENJAMIN FRANKLIN, THE PRINTER.

WHILE Franklin became eminent as a man of science, he was also being of public service to his country.

In the year 1763 he was appointed *Clerk to the General Assembly* at Pennsylvania. This is worth remembering, on account of a little circumstance which happened soon after. It is said that he was appointed without opposition the first year, but that, in the second year, a new member opposed his re-election in a long speech. Franklin was, however, elected, and, as his opponent was a man of talent and character, he saw the propriety of gaining his good opinion. He was too independent to pay any servility to him, but he hit upon an expedient which showed his knowledge of human nature. Having learned that the gentleman possessed a rare and curious book, he wrote him a polite note, begging to be favoured with the loan of it for a few days. The book was immediately sent, and in about a week was returned by the borrower, with a short note expressing his gratitude for the favour. The gentleman, it is said, was much conciliated by the circumstance; the next time he met Franklin in the Assembly

he addressed him with great civility, and at length became his intimate friend.

There is a good lesson to be learned from this anecdote. Franklin observed, "This is another instance of the truth of a maxim I had learned, which says, 'He that has done you a kindness will be more ready to do you another than he whom you yourself have obliged.' It shows, also, how much better it is, when you meet with an enemy, to remove his enmity quietly than return a similar feeling. You may always do likewise. Make it a rule to have no enemies, but to make all men your friends.

The next public office held by Franklin was that of *Deputy Postmaster for Pennsylvania*. At this time he took a more active part in the affairs of the city. He improved the city police; and he established a fire-insurance company, the first that was projected in America. He formed many more useful institutions, and was appointed by the State to other useful offices. Finally, in the year 1737, instead of being the clerk, he became one of the representatives in the "House of Assembly."

At the time of Franklin,

America was not an independent kingdom, but an English colony. The English Government, as well as the American, found out his useful qualities, and appointed him POSTMASTER GENERAL TO THE BRITISH COLONIES. In his hands the Post-Office was much improved; and it yielded to Great Britain a ~~90~~ venue three times as much as that of Ireland. His next public deed was the drawing up of a plan of government for all the colonies; and the next the establishment of means for their defence.

In nearly all things that Franklin did he showed care and skill. Thus becoming more and more known for his good qualities, greater and more important duties were heaped upon him. He was appointed agent for the State of Pennsylvania, and also became agent for the States of Georgia, Massachusetts and Maryland. On his return to America, after transacting the business of these States in England, he received the thanks of the whole Assembly of Pennsylvania, and a reward of £5,000 for his services.

It has been said, that "were we to pursue the remainder of this great man's history, we should find the fame of the patriot vying with that of the philosopher in casting splendour over it. We should find the originally poor and unknown tradesman standing before kings, associating with the most eminent statesmen of his time, and arranging along with them the wars and treaties of mighty nations. Who will say,

after reading his story, that anything more is necessary for attaining knowledge than the determination to attain it? Who will say that there is any other obstacle except a man's indolence and listlessness, that may not be overcome? The secret of this man's success was, that he was ever awake and active; that he suffered no opportunity for advancement to escape unimproved; that however poor he found at least a few pence, even by diminishing his scanty meals, to pay for the loan of the books he could not buy; and that however hard-worked he found a few hours in the week, were it by sitting up half the night, after toiling all day, to read and study. His industry, his perseverance, his self-command are for the imitation of all. All may derive encouragement and instruction from his example; and though they may not overtake the light of his knowledge, they may at least follow its path; they may guide their footsteps by its illumination."

But although we have reached the latter part of his history, I cannot yet close it. You shall hear something of the last great event in which he was engaged.

During the times of which we have spoken the States of America were English colonies. England, however, did not treat her colonies with justice; the Government tried to make them pay heavy taxes to meet the expenses of the wars in which she had engaged. The Americans said it was not fair they should do so, for they did not

begin the wars; they had had nothing to do with them. But the English government said, You are part of the kingdom of Great Britain; you must bear part of the expense of all the public acts. Then the Americans replied, This would be fair if we were treated as a part of the nation, and were allowed to have a voice in its government; but we are not allowed to send any members to the parliament —we are not "represented."

The Americans were right in their remonstrances, but the English Government only replied, We have the *right*, and we will make you pay taxes. So the Americans resisted; they would not receive any articles of food that were taxed; and when some chests of tea were brought into the port of Boston, they were thrown by the Americans into the sea. A war then followed, and the States of America combined to resist the British Government.

At the beginning of this war Franklin made constant efforts to bring about a reconciliation. As before, he was treated by the ministry and nobles of England with the greatest respect and esteem. His efforts might have succeeded, but, for a certain fault, he was treated by the English Government with great rigour, and was dismissed from his office of Postmaster General. Whether he was guilty or not of the fault for which he was dismissed, I cannot say; but he considered the English Government as ungrateful, and from that time he gave up his attempt to reconcile the two countries.

He was soon after appointed the chief of the delegates from the American States which had determined to resist the English. Throughout the whole struggle with the Government Franklin occupied a most prominent part. He was sent as an ambassador from the UNITED STATES, as the Americans now called their country, to the Court of FRANCE, where he soon brought about an alliance between the two countries, and the assistance of the French army. Thus he did not rest until, in the year 1783, he signed at Paris the treaty with Great Britain, by which the United States were recognised as an independent country.

Two years after the signing of this treaty he returned to his native country. He was as usual received with the greatest acclamation; his grateful and admiring countrymen immediately elected him as the President of the Supreme Council. In this Council, although he was nearly eighty years of age, he lent his powers of mind, still perfect, to form the constitution of the new Government.

Thus he continued to labour until 1788, when he began to feel the effects of his old age, and retired from public life. In the year 1790 he closed his eventful and honourable life. At his death the poor son of a soap-boiler was renowned as a man of learning, as a philosopher, as one of the great founders of a new science, and as one of the fathers and founders of a new and mighty nation.

THE ENGLISH TRAVELLER.

MIDDLESEX.

"MY DEAR CHILDREN,—

"The day after our visit to the suburbs, I set out on a tour through the county of MIDDLESEX. My kind friend who had been my guide through London did not say good-bye until he had seen me inside the Hounslow Omnibus.

"On my way to Hounslow I passed through Kensington, Brentford, and other places; I afterwards visited Staines, Uxbridge, and other towns, for I went all round the county. Suppose I give you a word or two on each place.

"The principal rivers in Middlesex are the THAMES, at the south; the LEA, at the East; the COLNE, at the West; and the NEW RIVER and the BRENT; all the latter, except the New River, are "tributaries" of the Thames; that is to say, they flow into it.

"The towns and villages of Middlesex are numerous.

"Beyond Kensington and Hammersmith, which may be reckoned as suburbs of London, are Brentford, Isleworth, and Twickenham.

"BRENTFORD is not a pleasant place; it is sometimes described as a long, ill-built, straggling town. It is situated on the river Brent, which divides it into two parts, Old Brentford and New Brentford. The former is notorious for 'dirty streets and white-legged chickens.'

"The principal trade is derived

from the market-gardens, flour-mills, malting, and brick-making.

"Between Brentford and the village of Isleworth there is a beautiful mansion called Sion House. It is situated on the banks of the Thames, and belongs to the Duke of Northumberland.

"The chief business in the village of ISLEWORTH is gardening; great quantities of raspberries and strawberries are grown for the London market.

"On the opposite side of the river, in Surrey, is KEW, noted for its Botanical Gardens.

"Adjoining Isleworth is HOUNSLOW, where there are powder-mills. Being on the high-road much business was formerly done here; but at the opening of the Great Western Railway, the business of the town decreased. Near the town is Hounslow Heath. This wide place is famous for the highway robberies which were once so frequent there. Now large tracts of it are cultivated by the farmer.

"TWICKENHAM is a beautiful spot. Like Brentford and Isleworth, it is surrounded by much garden ground. From its pleasant situation on the bank of the Thames there are many mansions in the neighbourhood, and gentlemen's houses. Twickenham, Isleworth, and Kew, and Richmond, in Surrey, are all

famous for their numerous villas. The principal in Twickenham are *Pope's Villa*, where the poet Pope lived, and *Strawberry Hill*, partly built by Sir Horace Walpole, afterwards Lord Orford. You may read of this nobleman in the History of England, in the reign of George II.

"Beyond Twickenham is HAMPTON. This village is well known from the splendid palace of *Hampton Court*, built by Cardinal Wolsey, and enlarged by Henry VIII. It is much visited by 'parties of pleasure' from London.

"Another well-known place is HARROW-ON-THE-HILL. It is famous for its large public school, where many eminent men have been educated. *Bruce*, the Abyssinian traveller, *Sir William Jones*, *Sheridan*, *Lord Byron*, and other celebrated men, went to Harrow School.

"In the south-west corner of Middlesex is STAINES. You may remember that it was at Runnymede, between this place and Windsor, that King John signed the Magna Charta.

"UXBRIDGE is another important town of Middlesex, situated near the river Colne. As at Brentford, here are flour-mills and brick-making.

"In the northern part of Middlesex is BARNET; an ancient little town. Here, you may remember, the decisive battle between the Houses of York and Lancaster was fought, and, Earl Warwick the King-maker perished on the field, A.D. 1471.

"ENFIELD, FINCHLEY, and HAMPSTEAD, are also worthy of notice.

"The soil of Middlesex I made a subject of inquiry. It is not so much divided into farms as other counties; it is principally occupied by market gardeners and nurserymen, who supply London with vegetables and flowers. Fulham, for instance, is noted for its asparagus beds. The soil is not naturally very fertile, but it has been much improved by the manure with which, from the earliest times, it has been well supplied. The gardeners used formerly to bring back manure from London in their carts, after they had sent there their load of vegetables. There is much haymaking in the county, as the hay being near London is extremely valuable.

"There is much clay in Middlesex, which is useful for making bricks; and as a large supply of bricks is constantly wanted in London, brick-making is an important business in this county.

"Let us notice the shape, size, and position of Middlesex. It is nearly of a square shape, and is the smallest county except Rutland. Its "position" is at the South of England. It is bounded on the North by Hertfordshire, on the South by Surrey, on the East by Essex, and on the West by Buckinghamshire.

"The name "Middlesex" means Middle Saxons, this county being the place where the Middle Saxons lived. The county where the East Saxons

lived is called Essex. The county of the South Saxons, Sussex.

These, dear children, are the principal particulars in the his-

tory of Middlesex. In my next letter I will send you the memory lesson on the county.

"Your faithful friend,
"HENRY YOUNG."

SONG OF THE OWL.

TU-WHOO! Tu-whoo!—In my ancient hall,
In my old gray turret high,
Where the ivy waves o'er the crumbling wall,
A king—a king reign I!
Tu-whoo!

I wake the woods with my startling call
To the frightened passer-by.

The gadding vines in the chinks that grow
Climbing up to me;
And the newt, the bat, and the toad, I trow
A right merry band are we.

Tu-whoo!

Oh, the coffined monks in their cells below
Have no goodlier company!

Let them joy in their brilliant sunlit skies,
And their sunset hues, who may;
But how softer far than the tints they prize
Is the dim of the twilight gray!

Tu-whoo!

Oh, a weary thing to an owlet's eyes
Is the garish blaze of day!

When the sweet dew sleeps in the midnight cool,
Some tall tree-top I win;
And the toad leaps up on her throne-shaped stool,
And our revels loud begin—

Tu-whoo!

While the bull-frog croaks o'er his stagnant pool,
Or plunges sportive in.

As the last lone ray from the hamlet fades
In the dark and still profound,
The night-bird sings in the cloister's shades,
And the glow-worm lights the ground—

T' whoo!

And fairies trip o'er the broad green glades,
To the fire-flies circling round.

Tu-whoo! Tu-whoo!—All the livelong night
A right gladsome life lead we;
While the starry ones from their jewelled height
Bend down approvingly.

Tu-whoo!

They may bask who will in the noonday light,
But the midnight dark for me!—MRS. HEWITT.

THE ENGLISH TRAVELLER.

MIDDLESEX.

"MY DEAR CHILDREN,—

"I send you, as I promised, the memory lesson on Middlesex. You will find it rather long, but I think it will not be found difficult to learn.

"Your faithful friend,
"HENRY YOUNG."

MIDDLESEX.

(Etymology.)—Middlesex is so called because it was the country of the Middle Saxons.

(Shape.)—Middlesex is of a squarish shape, but it is much indented at the south by the windings of the Thames. In size, it is the smallest county in England except Rutland.

(Boundaries.)—It is bounded on the north by Hertfordshire, on the south by Surrey, on the east by Essex, and on the west by Buckinghamshire.

(Soil.)—The soil is not remarkably good, but it has been artificially improved. It is much cultivated by the market-gardener and nurseryman; and much hay is made for the supply of London. There is much clay in the soil, which is used for brick-making.

(Surface.)—On the whole, Middlesex is very level; it does not contain any hills worth mentioning.

(Rivers.)—The principal rivers are the Thames, the Lea, the Brent, and the Colne.

(Capital and other towns.)—The capital of Middlesex is LONDON, a famous city, which is also the capital of all England.

London has been an important place from the time of the Romans, although it suffered in former times from fire and plague. Its importance is partly derived from its position on the Thames, and from the soil on which it is placed.

It is also important because of its size, covering nearly thirty-five square miles, containing 10,000 streets, more than 300,000 houses, and nearly 2,400,000 inhabitants. The immense wealth of many of these inhabitants is another source of its importance.

The fineness of some of the streets and squares, parks, bridges, and docks, is worthy of notice. The principal streets are Oxford Street, Regent Street, Pall Mall, Piccadilly, St. James's Street, the Strand, Fleet Street, Ludgate Hill, Cheapside, King William Street, Holborn, and the new street, Victoria Street.

The principal squares are Belgrave, Cavendish, Portman, Russell, Bloomsbury, Fitzroy, and Euston Squares.

The principal parks are Hyde Park, St. James's Park, and Regent's Park.

The principal bridges are London, Southwark, Blackfriars, Waterloo, Hungerford, Westminster, and Vauxhall Bridges.

The principal docks are the London, St. Catherine's, and East and West India Docks.

The markets, railway stations, and cemeteries of London are also worth noticing. The principal

markets are, for vegetables, fruit, and flowers, COVENT GARDEN; for meat, NEWGATE; for cattle, SMITHFIELD; for fish, BILLINGSGATE and HUNGERFORD MARKETS; for corn and coals, the CORN and COAL EXCHANGES.

The principal railways are the London and North Western, South Western, Great Western, Great Northern, Eastern Counties, and South Eastern.

The principal cemeteries are those at Kensal Green, Highgate, Abney Park, Norwood, and Bow.

The hospitals, public schools, and colleges, and numerous churches of London, also help to render it famous.

Some of the numerous fine buildings in London may also be mentioned. The principal ancient buildings are the Tower, St. Paul's, Westminster Abbey, Westminster Hall, Christ's Hos-

pital, Guildhall, the Mansion House, and the Monument.

The principal modern erections are the statues of King William IV., the Duke of Wellington, Lord Nelson, the Duke of York, and others; the Bank, Royal Exchange, General Post Office, Buckingham Palace, New Houses of Parliament, the Great Exhibition, and others.

The principal suburbs of London are, in the north, Islington, Holloway, Kingsland, &c.; in the south, Southwark, Kennington, Camberwell, &c.; in the east, Whitechapel, Stepney, Bow, &c.; and in the west, Knightsbridge, Brompton, Kensington, &c.

The other towns of Middlesex are not important; the principal are Brentford, Isleworth, Twickenham, Uxbridge, Harrow, Staines, Barnet, &c.

THE POND AND THE BROOK.

"NEIGHBOUR Brook," said the Pond one day,
"Why do you flow so fast away?
Sultry Juno is hastening on,
And then your water will all be gone."

"Nay, my friend," the Brook replied,
"Do not thus my conduct chide;
Shall I rather hoard than give?
Better die than useless live."

Summer came, and blazing June
Dried the selfish Pond full soon,
Not a single trace was seen
Where it had so lately been;

But the Brook with vigour flowed
Swift along its pebbly road,
And the fragrant flowers around
Loved to hear its happy sound.

ETYMOLOGY.

CHAPTER III.

THE INFLECTIONS OF VERBS—PARTICIPLES.

P. We will talk to-day of the Participles. Here is a participle—"laughing." I will place this participle in two different sentences, and you will then see that it answers a different purpose in each:—

1. Mary is a *laughing* child.
2. Tom is *laughing* loudly.

What part of speech does the "laughing" in the first sentence resemble?

Ion. It is like an adjective, because it tells you what sort of a child Mary is; she is a child who laughs very much.

P. Now look at the word "laughing" in the second sentence.

W. Here it is like a verb because it declares that Tom is doing something.

Ion. And it is like a verb because it has the adverb "loudly" joined to it.

P. Here is another participle which is like a verb:—

I see Mary *mending* her frock.

In what case is the word frock?

L. It is in the objective case, because the frock is being mended. "Mending" is a *transitive* participle, papa, for the action passes on to the frock; and it governs the objective case. So there are three reasons why a participle is like a verb:—

1st, A participle expresses a doing something.

2nd, It may have an adverb joined to it.

3rd, It may govern an objective case.

P. You have thus seen that the participle is like both the adjective and the verb, and you can now understand its name. To participate means to share in. Thus the words *singing*, *laughing*, *mending*, and many others, are called PARTICIPLES because they participate in the nature of the verb and the adjective.

I will now give you another word, and you shall try whether it is a participle or not. Try the word "beloved."

W. "He is much *belored*"—it is like a verb because it shows that something is *done to* him. And it is like a verb, also, because it has the adverb *much* joined to it. Now, if we can use it as an adjective, it is a participle.

Ion. Yes, we can. Here is a sentence.

My *beloved* brother Willie.

"Beloved" is like an adjective, because it shows what sort of a brother you are. But there is a difference between this participle and the former ones. The former express the *doing of* an action—they are active participles; but the word beloved expresses an action *being done to*—it is a passive participle.

W. They differ, too, in their endings : the active participles end in *ing* and the passive in *ed*.

P. This is generally the case ; but there are participles with other endings ; thus—

“The cup is *broken*,”
“The *broken* cup.”

I will, however, make the rule for you.

DEFINITION.—There are certain parts of a verb which participate in the nature of the verb and of the adjective, and are therefore called **PARTICIPLEE**RS ; they generally end in *ing* or *ed*.

EXAMPLES.—The girl is *loving*. The *loving* girl. The lion is *roaring*. The *roaring* lion. The ass is *despised*. The poor *despised* ass. The prisoner is *condemned*. The *condemned* prisoner.

L. Before you make the

PARSING EXERCISE, papa, will you let me mention something ? I notice that each participle is used with the auxiliary verb *is* ; and when it is thus joined to the auxiliary it makes what we called a **COMPOUND VERB** in one of our lessons.

P. True ; so you may say that a compound verb consists of an auxiliary verb and a participle ; thus you see another **use of the participle**. You must remember, however, that the participle is often used by itself as a verb, without any auxiliary ; thus—

Here comes James—*running* quickly.

I see a cat *eating* some cheese.

He *lored* James.

Now for the exercise.

No. 25. PARSING EXERCISE.

I see the babe sleeping. Sing to the sleeping babe ! The weeping mother. Here comes the mother weeping. I may go home rejoicing. I feel delighted. I am going to make hay, for it is a pleasing occupation. So I am pleased. Walking through the street I saw a white horse. I bought him a book bound in morocco. That man, so admired for his courage, and respected for his honesty, was neglected by his countrymen.

BOY, NEST, AND BIRD.

WITH all my might I make request,
Dear boy, harm not my little nest ;
Oh ! do not try to peep thorein,
Where lie my little children.
They'll scream with terror and surprise,
If thou show'st them thy large round eyes.

The boy much longed the birds to see,
Yet quietly far off stood he,—
In peace the poor bird reached her nest,
And warmed her young with downy breast,
Then warbled forth her song of joy
To the kind-hearted little boy.

Spekter's Fable Book.

INDEX TO VOLUME IV.

MORAL BIOGRAPHY.	Page	Page	Page		
Introduction. Industry — The Nobleman's Son	1	Industry — Benjamin Franklin, the Printer	305	The Parts of a Plant — The Seed (concluded)	278
Industry — The Man who made a Steam Engine	17	Industry — Ditto (continued)	321	Recapitulation	292
Industry — Ditto (continued)	33	Industry — Ditto (continued)	337	ENGLISH HISTORY.	
Industry — Ditto (continued)	49	Industry — Ditto (continued)	353	Recapitulation. From Julius Cæsar to William the Conqueror	7
Industry — The Man who made Canals..	65	Industry — Ditto (continued)	369	Ditto — From William I. to Edward I. ..	24
Industry — Ditto (continued)	81	NATURAL HISTORY.		Ditto, ditto	38
Industry — Ditto (continued)	97	Vertebrated Animals. Recapitulation. The Twelve Orders of Mammals	6	The Tudors — Henry VII. ..	57
Industry — The Man who Invented the Spinning Frame ..	113	Recapitulation — ditto	20	Ditto, ditto	74
Industry — Ditto (continued)	129	BOTANY.		Ditto, ditto	86
Industry — The Man who Invented the Spinning Mule	145	Introduction. Distinction between Vegetables and Animals	23	Ditto, ditto	102
Industry — The Man who Invented a Power Loom.....	161	Distinctions of Plants	36	Ditto, Henry VIII... ..	104
Industry — Ditto (continued)	177	The Parts of a Plant — The Root	52	Ditto, ditto	121
Industry — Another Man who Invented a Loom	193	Ditto — The Stem of an Exogen	69	Ditto, ditto	136
Industry — Ditto (continued)	209	Ditto — The Stem of an Endogen	100	Ditto, ditto — The Reformation	152
Industry — The Calico Printer. The Silk Thrower.....	225	Ditto — The Leaves ..	116	Ditto, ditto	168
Industry — The Man who Improved Pottery	241	Ditto, ditto (continued)	133	Ditto — The Social Events of the Times of Henry VIII. ..	182
Industry — Ditto (continued)	257	Ditto, ditto (continued)	148	The Tudors — Edward VI. ..	216
Industry — The Man who Improved Wood-engraving ..	258	Ditto, ditto (continued)	164	Ditto — Mary	235
Industry — The First English Printer ..	289	Ditto, ditto (continued)	181	Ditto, ditto	249
		Ditto — The Sap	198	Ditto — Elizabeth	264
		Ditto — The Flower ..	214	Ditto, ditto	282
		Ditto, ditto (continued)	220	Ditto, ditto	296
		Ditto, ditto (continued)	244	Ditto, ditto	300
		Ditto — The Seed	206	The Times of Queen Elizabeth	326
				Recapitulation — The Tudors	340
				Ditto, ditto	343
				Ditto, ditto	351
				Ditto, ditto	358
				ENGLISH TRAVELLER.	
				The Londoners. Water, Fire, and Light ..	9

INDEX TO VOLUME IV.

Page	Page	Page	
More about the Londoners. Sanitary Condition	26	Etymology — Inflections of the Parts of Speech—Nouns and Pronouns—Number 142	Songs for the Months. February — Loud wind, strong wind..
London. "Sanitary Condition," Highways, and Burial Grounds.....	40	Ditto, ditto—Person 172	80
Ditto—Moral Condition	61	Ditto, ditto — Different Inflections for Gender	Songs of Industry. Morning, Mid-day, Afternoon, and Evening Songs....
Ditto—The Thames, Bridges, &c.	77	Ditto, ditto—Different Inflections for Number	144
Ditto—The Port of London The Docks	89	Ditto, ditto — Adjectives	Songs for the Seasons. Spring—How sweet the early breath of Spring
Ditto — The Ancient Buildings	139	Ditto, ditto, ditto....	208
Ditto, ditto (continued)	155	Ditto—On the Different kinds of Pronouns	Daily Hymn—Lord, I would own.....
Ditto, ditto (continued)	171	Ditto, ditto	272
Ditto, ditto (continued)	187	Ditto—On the Different kinds of Adverbs	We merry minstrels, a Round
Ditto, ditto (continued)	202	Ditto—Recapitulation 300	336
Ditto — The Modern Buildings	219	Ditto, ditto	Good night, a Round..
Ditto, ditto	266	Ditto—On the Different kinds of Verbs 333	 POETRY.
Ditto —The Northern Suburbs	329	Ditto—Inflections of Verbs — Indicative & Potential Moods 348	A happy new year, says the old church bell
Ditto, ditto	345	Ditto, ditto—The Imperative, Subjunctive, and Infinitive Moods	70
Ditto—The Southern Suburbs	362	Ditto—Inflections of Verbs — Participles	A land where sweetest roses fade.....
Ditto—The Western Suburbs	366	304	350
Middlesex	372	Ditto—The Inflections of Verbs — Participles	A swallow in the spring.....
Ditto	373	377	114
ENGLISH GRAMMAR.			A troublesome pest is the bold brown rat 224
FOREIGN TRAVELLER.			Away, hoary winter..
Orthography—Use of Grammar, Syllables, and Words.....	12	Turkey	22
Etymology—The nine classes of Words— Nouns and Adjectives	28	Ditto	Be kind to the young In thy youth's merriment day
Ditto, ditto—The Pronouns	42	Constantinople — The Dervishes	185
Ditto, ditto—The Adverbs	62	The Turks—Religion, Habits, &c.	Beneath a green and mossy bank
Ditto, ditto—Prepositions and Conjunctions	92	109	335
Ditto, ditto—The Interjections. Summary	106	The Turks — Opium-eating.....	Be quiet, more ready to hear than to speak
Ditto, ditto—Derivation.....	25	Italy	377
Ditto—Inflections of the Parts of Speech —Nouns and Pronouns—Gender ..	141	Ditto—Rivers, Commerce, and Manufactures	Can I another bear to see
MUSIC.			64
Industry—I remember a Lesson.....			Children who in peace are living
			175
			Come, let us go and see the lambs.....
			365
			Did you but know, when bathed in dew 44
			Don't tell me of tomorrow
			120
			Ditto
			285
			Down in my solitude under the snow....
			98
			Do you grieve to lie in your lonely bed. S16
			Fear oftentimes restraineth words.....
			363
			God made the sky that looks so blue..
			163
			God speed the plough 208

INDEX TO VOLUME IV.

Page	Page	Page
Go, seek salvation, not by works but grace 344	Oh, raise me in my bed, mother 73	The warm breath of Summer 213
Hark the little birds are singing 281	Oh, say, busy bee, now where are you going 320	"Thy will be done" a simple word 234
He prayeth best who loveth best 128	Oh, yes, the poor man's garden 261	'Tis a lesson, good and wise 304
Here lies an old sol- dier 59	Pause not to dream.. 68	To-morrow will be Sunday, Ann 357
"He will not come," said the gentle child 325	Restless forms of qui- vering light 207	Tu-whoo! Tu-whoo! in my ancient hall 374
How should children spend the day 399	Scorn not the slight- est word or deed ... 342	Under a spreading chestnut tree 103
How sweet to be al- lowed to pray 248	Six years, six happy years, have lit 190	Up and down, up and down 85
"How fast those pretty blossoms fall 376	Sum up at night what thou hast done by day 277	"Up, up!" cries the wakeful cock 353
If wishes were efforts 135	Sweetest songster of the grove 308	We are but two, the others sleep 36
I hear thee speak of the better land 290	The dormouse hath waked from his winter sleep 288	When death's cold touch thrills to the freezing heart 137
Improve the passing hours 58	The melancholy days are come 361	Whene'er you speak of those who are away 192
I slept and dreamed that life was beauty 126	The moments fly, a minute's gone 240	When is a man less than a man 151
Lady-bird, lady-bird, fly away home 291	The shades of night were falling fast ... 176	Ditto, ditto 215
Look, how beautiful are we 107	There are tones to the midnight breezes given 124	Ditto, ditto 237
Mine shall be glory, the warrior said ... 224	There is a reaper whose name is death 108	Ditto, ditto 256
Never say "I can't," my dear 99	There was a poor widow that lived in a cot 48	Who hath not heard of the old oak tree 308
Now had the Autumn day gone by 107	The swelling of an outward fortune ... 324	Who seek a friend ... 157
Oh, call my brother back to me 271	Ye call me, ye call me, the green buds are swelling 759	With all my might I make request 378

